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Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
Sixth session
Medellín, Colombia, 18–24 March 2018
Item 5 of the provisional agenda*
Report of the Executive Secretary on the implementation of the first work programme for the period 2014–2018

Information on work related to capacity-building (deliverables 1 (a) and 1 (b))

Note by the secretariat

1. In decision IPBES-2/5, section I, paragraph 1, the Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) established a task force on capacity-building for the period 2014–2018. The terms of reference for the task force are set out in annex II to the decision. The primary purpose of the task force is to support the achievement of deliverables 1 (a) and 1 (b) of the first work programme in a manner that supports the implementation of the whole work programme.

2. In decision IPBES-5/1, section II, paragraph 1, the Plenary welcomed the Platform's capacity-building rolling plan, including its executive summary, set out in annex I to the decision, noting that the rolling plan was a living document intended to guide the work of the Platform and collaboration among partners aimed at the implementation of deliverables 1 (a) and 1 (b) of the Platform's first work programme.

3. Information on the activities of the task force on capacity-building is set out in the report of the Executive Secretary on the implementation of the first work programme of the Platform (IPBES/6/2). The annex to the present note sets out further information on activities being carried out by the task force on capacity-building in addressing its mandate, including activities planned and conducted by the task force and partners under the rolling plan. The annex is presented without formal editing.

* IPBES/6/1.

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Annex

Information on work related to capacity-building

I. Membership of the task force

1. The task force on capacity-building consists of the following members:

Name	*Country*	*Function*
Ivar Baste	Norway	Bureau member and co-chair of the task force
Spencer Linus Thomas	Grenada	Bureau vice-chair and co-chair of the task force
Rashad Allahverdiyev	Azerbaijan	Bureau member
Sebsebe Demissew	Ethiopia	Member of the Multidisciplinary Expert Panel*
Floyd Homer	Trinidad and Tobago	Member of the Multidisciplinary Expert Panel*
Carlos Joly	Brazil	Member of the Multidisciplinary Expert Panel*
Leng Guan Saw	Malaysia	Member of the Multidisciplinary Expert Panel*
Vinod Mathur	India	Member of the Multidisciplinary Expert Panel*
Rob J.J. Hendriks	The Netherlands	Expert
Prudence Galega	Cameroon	Expert
Nelio Bizzo	Brazil	Expert
Györgyi Bela	Hungary	Expert
Tesfaye Awas Feye	Ethiopia	Expert
Clarissa Arida	Philippines	Expert
Gladys Hernández	Cuba	Expert
Robert Kasisi	Canada	Expert
Zane Libiete	Latvia	Expert
Selim Louafi	France	Expert
Carmel Mbizvo	South Africa	Expert
Wendy Nelson	New Zealand	Expert
Ana Travizi	Croatia	Expert
Natalia Zamora	Costa Rica	Expert
Yousef Al-Hafedh	Saudi Arabia	Expert
Im-Han Kim	Republic of Korea	Expert
Marie-Lucie Susini	Belgium	Expert

*The mandate of all members of the Multidisciplinary Expert Panel will come to an end at the close of the 6th session of the Plenary, on 24 March 2018. Members of the Multidisciplinary Expert Panel who are not re-elected will be replaced on the task force.

2. In accordance with the terms of reference for the task force, the co-chairs also invited resource persons to participate in the meetings of the task force, following consultation with the Bureau. Representatives of a number of organizations and initiatives have been invited to participate in task force meetings as resource persons for addressing particular areas of work. These include the United Nations Development Programme, the United Nations Convention to Combat Desertification, the United Nations University Global Regional Centres of Expertise on Education for Sustainable Development Network, Global Biodiversity Information Facility, Sub-Global Assessment Network, Deutsche Gesellschaft für Internationale Zusammenarbeit, the Bio-Bridge Initiative under the Convention on Biological Diversity and IPBES task force on indigenous and local knowledge systems.

3. The work of the task force has been supported by the technical support unit of three staff members located at the Norwegian Environment Agency. The unit was established on 1 January 2015 and is provided fully as in-kind support by the Government of Norway.

II. Fifth meeting of the task force

4. The fifth meeting of the task force on capacity-building took place in Trondheim, Norway, from 26 to 28 April 2017.

5. The objectives of the meeting were to develop IPBES capacity-building activities to implement the rolling plan for the intersessional period 2017-2018, consolidate contributions under the rolling plan and strengthen collaboration with contributing organisations.

6. Prior to the meeting, and in line with the Plenary's requests, the task force invited organizations having indicated interest in supporting the capacity-building work of IPBES to participate in the meeting and indicate how they can contribute to the implementation of the rolling plan.

7. During the meeting, the task force entered into five collaborative initiatives, forming "task groups" with contributing organizations for the implementation of the rolling plan. The five groups will be working on the following:

(a) Task group 1: developing guidance regarding processes and mechanisms that support the implementation of the capacity-building rolling plan;

(b) Task group 2: developing a capacity-building web portal supporting the implementation of the capacity-building rolling plan;

(c) Task group 3: supporting the uptake of regional assessments;

(d) Task group 4: developing guidance on national and (sub) regional science-policy platforms and national and sub-regional assessments; and

(e) Task group 5: supporting increased use and development of IPBES learning materials for capacity-building.

8. Task groups 1 and 2 are working towards developing the structures for the implementation of the rolling plan, while task groups 3 to 5 are working towards the implementation of prioritised, cross-cutting elements under the three strategies of the capacity-building rolling plan.

III. Implementation of the capacity-building rolling plan

Introduction

9. The capacity-building rolling plan[1] identifies the principles, strategic directions, modalities and actions for building and further developing the capacities of individuals and institutions based on the priority needs[2] established by the IPBES Plenary. The successful implementation of the rolling plan relies on contributions from, and collaboration with, the wide range of institutions already conducting, or interested in conducting, capacity-building activities that relate to the IPBES work programme and the priority capacity-building needs approved by the IPBES Plenary.

10. The capacity-building rolling plan consists of three strategies: 1) learning and engagement; 2) facilitating access to expertise and information; and 3) strengthening national and regional capacities. Activities under strategy 1 focus primarily on supporting implementation of the IPBES work programme itself, and on learning from that implementation. The activities led by the task force, therefore, fall mainly under strategy 1. Activities under strategy 2 will mainly be drawing on the work of partners and other IPBES task forces and expert groups, while activities under strategy 3 will mainly be carried out and facilitated through partnerships and matchmaking activities.

11. The task force is undertaking an incremental approach to building collaboration and engagement with the wide range of institutions involved in capacity-building activities relating directly to the IPBES work programme and the priority capacity-building needs approved by the IPBES Plenary. The approach

[1] Full IPBES capacity-building rolling plan in IPBES/5/INF/3, Executive summary in Annex I to decision IPBES-5/1.

[2] Annex I to decision IPBES/3/18.

aims to ensure a sustainable, manageable and transparent step-wise process that mobilises resources through in-kind contributions and alignment of activities towards the implementation on the rolling plan. This is done by engaging in strategic dialogues for alignment of activities with organisations that have already signalled their interest in supporting the IPBES capacity-building rolling plan and by inviting other organisations to contribute through an open invitation on IPBES.net and by launching targeted calls in response to those needs viewed most urgent by IPBES subsidiary bodies and expert groups.

12. Activities and other contributions to the implementation of the rolling plan, including those of partners can be found in appendix 4. The capacity-building task force aims to continuously update and make available a comprehensive list of activities on the IPBES website.

13. The following sections A to C present progress in the implementation of the three strategies of the capacity-building rolling plan.

A. Implementing strategy 1: learning and engagement

1. IPBES fellowship programme

14. The first cohort of IPBES fellows, composed of 33 fellows from the regional assessments and the thematic assessment on land-degradation and restoration, will become alumni of the fellowship programme in 2018.

15. The task force is developing an alumni network for IPBES fellows. The aim of that network is that members help identify new fellows and represent a pool of potential experts for new IPBES assessments.

16. The capacity-building task force will conduct a final review of the fellowship programme for the land degradation and restoration assessment and regional assessments, including collecting feedback from a wide range of actors involved in the fellowship programme during or shortly after the sixth session of the IPBES Plenary. The task force will also conduct a smaller mid-term evaluation of the fellowship programme supporting the global assessment to continue improving the IPBES fellowship programme by building upon experiences and lessons learnt. The results of the evaluation(s) will guide the further implementation of the programme. The results will be shared with the Multidisciplinary Expert Panel and Bureau as well as reported on to the seventh session of the IPBES Plenary.

17. As part of its work to strengthen fellows' capacities on the science-policy interface, the fellows training for 2018 will be held in Medellin, Colombia during the sixth session of the IPBES Plenary.

18. Further information on the IPBES fellowship programme can be found in appendix 1.

2. Training workshops

19. The task force planned and facilitated three workshops in 2017 with the support of the management committees of the assessments and the assessments' technical support units. The workshops were designed to further build experts' capacities around identified core needs through hands-on training during the drafting of the second order draft of these assessments and the first drafts of their summaries for policymakers. The following workshops were conducted:

(a) Capacity-development and writing workshop for IPBES experts from Central Europe, Eastern Europe and Central Asia, held from 30 January to 3 February 2017 in Antalya, Turkey. The workshop focused specifically on assessing the state of knowledge on biodiversity and nature's contributions to people and societies in Central Europe, Eastern Europe and Central Asia using group discussions and writing sessions with experts from these regions. In-kind contribution was received from the Ministry of Forestry and Water Affairs in Turkey.

(b) Capacity-development writing workshop for experts of the Africa regional assessment, held from 13 to 17 February 2017 in Golden Gate National Park, South Africa. The workshop was designed to build the assessment experts' capacities around identified core needs through hands-on training, including how to draft the executive summaries of the chapters. In-kind contribution was received from the Norwegian Environment Agency.

(c) Capacity-development workshop to develop summaries for policymakers on the thematic assessment of land degradation and restoration and the three regional assessments (Africa, Americas and Asia Pacific), held from 27 February to 2 March 2017 in Oslo, Norway. The workshop was organized jointly for four assessments, with a view to foster mutual learning while promoting a common approach to

summaries across the assessments. In-kind contribution was received from the Norwegian Environment Agency.

3. Regional dialogue meetings

20. The capacity-building task force in collaboration with the management committees of the regional assessments organised four regional dialogue meetings between IPBES national focal points and experts in the period June to August 2017. The aim of the meetings was *to strengthen government engagement in the production and use of the regional assessments, and to provide insight for assessment experts into how their assessment is perceived and received by Governments*. The meetings were arranged in response to requests from members of the Platform, and implement strategy 1 and 3 of the rolling plan on further enhancing Governments' capacities for engaging in the production and uptake of IPBES assessments.

21. The regional meetings were conducted as the third and main step of a three-step process to stimulate Government involvement and ownership in the production of the four regional assessments. Step one consisted in providing information to Governments delegates on the regional assessments as part of the regional consultations held immediately before the fifth session of the IPBES Plenary. Step two included a series of webinars during the review period focusing on familiarisation on the content of the chapters and the summary for policy makers, described below. Finally, step three consisted of four regional dialogue meetings in Africa, Americas, Asia Pacific and Europe and Central Asia.

22. All four regional dialogue meetings were chaired by IPBES Bureau members from the respective regions, followed the same agenda and applied a similar structure and methodology. The agenda comprised four substantial items: introduction to the regional assessment, learning from the second external review, preparing for the use of the regional assessment, and preparing for the approval process of the summary for policymakers at IPBES-6.

23. The four dialogue meetings were attended by a total of 76 national focal points, and by the co-chairs and some of the assessment authors, members of the Bureau and Multidisciplinary Expert Panel from the region, members of the task force on capacity-building and of the secretariat.

24. An overview of locations, participants and contributing organizations to the four regional dialogue meetings can be found in Appendix 3, table 1.

25. Significant financial and in-kind contributions[1] were raised for all meetings, including free venue for the meetings in Asia Pacific and Europe and Central Asia as well as translation services for the meetings in Africa and the Americas. Organizing the meetings back-to-back with the assessments' third author meetings helped reduce costs.

26. The evaluation surveys conducted after the meetings show that participants were very satisfied, giving an overall rating of the meetings of 8.7 on a 10-point scale with 10 being the top-score. Furthermore, the importance and success of the regional dialogue meetings were highlighted by the 10th Multidisciplinary Expert Panel and Bureau meeting.

27. During the meeting, participants stressed the importance of dialogue and collaboration across the science-policy interface between IPBES experts and national focal points, noting that this strengthens knowledge and engagement, lowers the threshold to contribute to review processes, and increases sustained involvement and ownership of IPBES processes. Language was flagged as an obstacle hampering the ability to engage in the IPBES process, especially in the Africa region.

28. Participants recommended organizing future dialogue meetings during or ahead of external review periods to ensure maximum benefits for both IPBES experts and national focal points.

29. A report of the meetings can be found in appendix 3.

30. During the regional dialogue meetings, the countries who had submitted comments under the external review were invited to present their experiences from the review *process* (e.g. how many were involved in the process, who was involved, timeframe, lessons learnt, etc.). The approaches applied in the review process varied considerably between countries and provided a good basis for discussions, peer learning and useful insights during the meetings. A summary of these processes can be found in appendix 3.

[1] See contributions to the implementation of the rolling plan in appendix 4.

4. Webinars

31. The task force on capacity-building is hosting the IPBES webinar series to support implementation of all three strategies of the capacity-building rolling plan. The objective of the webinars is to support the IPBES work programme by increasing understanding of key concepts, processes and outputs.

32. As a follow-up on the discussions with Governments in the regional meetings in Bonn prior to the fifth session of the IPBES Plenary in March 2017, it was decided to organize one webinar explaining the processes around the second order draft external review period, and to also organize a series of assessment-specific webinars for the regional assessments and the land degradation and restoration assessment. The webinars were primarily intended for national focal points, Government officials and stakeholders already engaged in, or considering participation in the review process. The process-orientated webinar was recorded by the IPBES Executive Secretary and made available two weeks before the external review period started.

33. Once the assessment reports went out for external review on 1 May 2017, the capacity-building technical support unit worked together with the secretariat, the assessment technical support units and their co-chairs to develop assessment-specific webinars which were presented by the co-chairs and made available online during the review phase. The objective of the assessment-specific webinars was to explain the scope of the respective assessments, to describe what a summary for policymakers (including its key messages) entails, and how it will be considered by the Plenary. The webinars for the Africa, Asia-Pacific and Europe and Central Asia regional assessments and for the land degradation and restoration assessment were pre-recorded and made available online in the week of 22 May 2017. The webinar for the Americas assessment was made available online as of 16 June 2017. For the Americas' assessment, the webinar was recorded in English and Spanish and for the African assessment in both English and French.

B. Implementing strategy 2: Facilitating access to expertise and information

Collaborative initiatives with contributing organisations forming pilot communities of practice

34. Building on lessons learned and advice received, the task force is focusing its initial collaboration with partners (mentioned above in section II. Fifth meeting of the task force) on three priority areas with transversal activities that cut across the strategies of the capacity-building rolling plan (task groups 3-5). In addition to supporting the uptake of assessments, developing guidance on national assessments and science-policy platforms and supporting the increased use and development of IPBES learning materials, these initiatives will serve as pilots to test and refine the general approach to organise the interface between IPBES and partner organisations. It is envisioned that the task groups will develop into three or more 'communities of practice'.

35. As part of its efforts to mobilise resources and work with partners in a transparent manner, the task force is issuing a call in 2018 to support the work on the three priority areas and stimulate the process of developing communities of practice. The call is inviting contributions from organisations that:

(a) wish to support the use and uptake of IPBES' assessments by aligning planned events to promote the use and uptake of approved assessment reports or pledging funds to support such activities;

(b) have taken part in processes on developing national or (sub)regional science-policy platforms and would like to share their examples and existing guidance document(s); or

(c) have developed learning materials on IPBES assessments or guides, or are planning to do so in the near future, and would like to share these.

C. Implementing strategy 3: Strengthening national and regional capacities

Developing guidance on national and (sub) regional science-policy platforms and national and sub-regional assessments

36. Partners in collaboration with the task force (task group 4) are working on developing guidance on national and (sub) regional science-policy interface platforms; national and sub-regional assessments; and national capacity self-assessment. The guidance can support countries and (sub) regions in establishing their own science-policy platforms and networks, and/or in carrying out national and sub-regional assessments. The task group is reviewing existing relevant guidance and will be reaching out in 2018, through a targeted call, to organisations that have taken part in the process of developing national or (sub) regional science-policy platforms for sharing their examples and existing guidance document(s).

IV. IPBES Capacity-building Forum

37. The IPBES Capacity-building Forum is a key vehicle for increasing engagement and facilitating cooperation with other institutions that fund, undertake or otherwise contribute to relevant capacity-building activities. Experiences and lessons learnt from the two meetings organised to date have fed into the development of the capacity-building rolling plan.

38. The Bureau, advised by the task force, recommends holding a third meeting of the IPBES capacity-building Forum in late 2018, back to back with the annual meeting of the capacity-building task force.

39. It is envisioned that the forum will be a venue to advance cooperation with representatives of current and new involved capacity-building partners. The task force will map and engage in bilateral dialogues with potential invitees to gauge their interest. The results from this exercise will inform the planning of the meeting.

40. A concept note for the meeting is included in appendix 2.

V. Further implementation

41. Information on the activities of the task force on capacity-building is set out in the report of the Executive Secretary (IPBES 6/2).

42. During the 2018-2019 intersessional period, IPBES will continue its work on implementing the capacity-building rolling plan, focussing on:

(a) the continuation of the fellowship programme as described above, including the selection of new fellows for any newly launched assessment (pending Plenary approval), as part of the implementation of strategy 1;

(b) the continuation and expansion of the work of the task groups to further increase engagement of partner organisations in capacity-building activities supporting IPBES objectives as described above, including specific calls for contributions and the facilitation of a third capacity-building forum. This work supports the implementation of strategy 1-3;

(c) the continuation of the work on strengthening national capacities for engagement and use of the work of IPBES, including arranging regional dialogue meetings on the global assessment and or the second work programme. These activities support the implementation of strategy 3;

(d) the further development of a dedicated capacity-building web portal on the IPBES website, to reflect all ongoing activities and contributions, and to facilitate further engagement in IPBES work on capacity-building, facilitating the implementation of all three strategies; and

(e) the continuation of capacity-building activities in support of experts undertaking IPBES deliverables, in particular in the case of any newly launched assessment. This action support the implementation of strategy 1.

Appendix 1 - Report on the IPBES fellowship programme

1. In decision IPBES 4/1 the Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services requested the task force on capacity-building to continue the piloting of the draft programme on fellowship, exchange and training, to report on its progress and to make recommendations for its further development to the Plenary at its fifth session.

2. The IPBES fellowship programme was initiated in 2015 as an unpaid fellowship scheme. The objectives of the programme is to further enhance skills and expertise of outstanding early-career individuals, both scientists and policy-makers, in production and use of environmental assessments for the conservation and sustainable use of biodiversity, long-term human well-being and sustainable development. Entry into the programme is highly competitive, and only 5 % of the applicants to the calls for fellows issued so far have been invited to join the programme. Fellows are selected by the Multidisciplinary Expert Panel with a view to achieve disciplinary, geographic and gender balance, following the same procedures as for other authors contributing to IPBES assessments. Selected fellows participate as part of a chapter team of an assessment and are expected to commit up to 15 per cent of their time in the assessment period. The time commitment includes author meetings, training, writing, and revising their specific chapter contributions in response to comments from other authors and the peer review.

3. The fellowship programme currently comprises 49 fellows from 37 countries. Key statistics for the fellows are summarised in table 1 below.

Table 1
Summary of key statistics for IPBES fellows

	Number of fellows		*Mean age*	*Level of education*	
	Male	Female		PhD	Master's degree
Total	**22**	**27**	**33 years**	**43**	**6**
LDR	3	4			
Africa	2	5			
Americas	2	4			
Asia-Pacific	2	5			
Europe and Central-Asia	3	3			
Global assessment	10	6			

4. The feedback on the programme by fellows has been very positive across the assessments. The latest evaluation of the programme (2017), which included survey responses from 37 fellows, rated the fellowship programme 9 on a 10-point scale, with 10 being the top-score. The fellows highlighted peer learning, engagement in an interdisciplinary network, increased understanding of IPBES and its assessments processes, and meaningful involvement in large-scale assessments as particularly valuable outcomes of the programme. The majority of fellows also reported great satisfaction with the associated mentorship programme, emphasising good communication and understanding with their mentors, and describing the mentorship programme as conducive to their professional development.

5. In addition to participating in author and chapter meetings related to the production of their respective assessments, fellows have participated in annual training workshops and 'induction days' ahead of the first author meetings organised by the task force and technical support unit on capacity-building. These training activities aim to a) build relations for peer learning and collaboration, and b) further enhance expertise on the science-policy interface on biodiversity and ecosystem services, in particular on the production and use of IPBES deliverables.

6. The annual training workshop for fellows in the 2017-2018 intersessional period will be organised in parallel with the sixth session of the Plenary. The workshop aims to further enhance fellows' knowledge of the biodiversity and ecosystem services science-policy interface through providing fellows the

opportunity to experience the formal process underlying IPBES decisions, and witness and learn from the dialogue between governments and experts prior to the Plenary's approval of assessments. The training will be supported financially by Future Earth and the Norwegian Environment Agency.

7. Seven fellows also participated in the four regional dialogue meetings between national focal points and IPBES experts organised in June-August 2017. In addition to participating in the meetings to learn about the science-policy interface activities of IPBES, the fellows assisted with various tasks such as translation, note taking and logistical arrangements.

8. Following the completion of the four regional assessments and the thematic assessment of land degradation and restoration, 33 of the fellows will become alumni of the fellowship programme. The task force on capacity-building and its technical support unit will develop an alumni network.

9. The capacity-building task force will conduct a final review of the fellowship programme for the land degradation and restoration and regional assessment, including collecting feedback from a wide range of actors involved in the fellowship programme during or shortly after IPBES-6. The task force will also conduct a smaller mid-term evaluation of the fellowship programme supporting the global assessment, to continue improving the IPBES fellowship programme by building upon experiences and lessons learnt. The results of the evaluation(s) will be shared with the Multidisciplinary Expert Panel and Bureau and guide the further implementation of the programme.

10. All IPBES fellows are listed in table 2 below.

Table 2

List of IPBES fellows

Assessment	*Name*	*Affiliation*	*Nominating Government Organisation*
Africa	Joyce Ojino	Ministry of Environment, Water and Natural Resources, Public Complaints Committee on the Environment	International Institute of Industrial Environmental Economics (IIIEE)
	Cosmas Dayak Kombat Lambini	Bayreuth Center for Ecology and Environmental Research (BayCEER)	Leibniz University of Hannover
	Nadia Sitas	Council for Scientific and ...dustrial Research	Council for Scientific and Industrial Research
	Gregory Mero Dowo	University of Zimbabwe	Tropical Resource Ecology Programme, University of Zimbabwe
	Dimpho Malebogo Matlhola	Okavango Research Institute, Univeristy of Botswana	Okavango Research Institute, University of Botswana
	Houda Ghazi	Faculty of Sciences Semlalia, Caddi Ayyad University	Faculty of Sciences Semlalia, Caddi Ayyad University
	Martha Mphatso Kalemba	Environmental Affairs Department	Environmental Affairs Department
Americas	Laura Thompson	U.S. Geological Survey, National Climate Change and Wildlife Science Center	National Climate Change and Wildlife Science Center
	Rodolfo Jaffe Ribbi	Vale Institute of Technology - Sustainable Development	University of Sao Paulo
	Juliana Sampaio Farinaci	University of Campinas	Brazil
	Maria Paula Barral	CONICET	National Institute of Agricultural Technology
	Julio Diaz Jose	Instituto Tecnologico Superior De Zongolica	Instituto Tecnologico Superior De Zongolica
	Mireia Valle	Universidad Laica Eloy Alfaro de Manabi	Universidad Laica Eloy Alfaro de Manabi

Assessment	*Name*	*Affiliation*	*Nominating Government Organisation*
Asia Pacific	Yasuo Takahashi	Institute for Global Environmental Strategies (IGES)	Institute for Global Environmental Strategies (IGES)
	Felicia Permata Sari Lasmana	Daemeter Consulting	Daemeter Consulting
	Aidin Niamir	Senckenberg Biodiversity and Climate Research Center	Senckenberg Biodiversity and Climate Research Center
	Amani Al Assaf	University of Jordan	University of Jordan
	Sonali Ghosh	Wildlife Institute of India	India
	Catherine Mitra Febria Oabel	University of Canterbury	University of Canterbury
	Yuanyuan Zhang	Minzu University of China	China
Europe and Central Asia	Zuzana Harmackova	Global Change Research Centre AS CR	Global Change Research Centre AS CR
	Fanny Boeraeve	Gembloux Agro Bio-Tech (University of Liege)	Gembloux Agro Bio-Tech (University of Liege)
	Rahat Sabyrbekov	Economics of Land Degradation	American University of Central Asia
	Carlos Antônio Bastos De Morais Guerra	German Centre for Integrative Biodiversity Research (iDiv)	Instituto de Ciências Agrárias e Ambientais Mediterrânicas
	Luca Coscieme	Trinity College Dublin	Trinity College Dublin
	Elena Osipova	IUCN, World Heritage Programme	IUCN
Land degradation and restoration	Sugeng Budiharta	Indonesian Institute of Sciences	Indonesian Institute of Sciences
	Maylis Desrousseaux	Lyon 3 University	Environmental law institute - Lyon 3 University
	Bernard Nuoleyeng Baateuwie	University for Development Studies	University for Development Studies
	Marina Monteiro	Universidade Federal de Goiás	Universidade Federal de Goiás
	Vanessa Marie Adams	University of Queensland, School of Biological Sciences	University of Queensland, School of Biological Sciences
	Ruishan Chen	Guoqing Shi	Hohai University
	Matthew R. Ross	Duke University	Duke University
Global	Basher Md Zeenatul	Michigan State University	Michigan State University
	Palomo Ignacio	Basque Centre for Climate Change	Basque Centre for Climate Change
	Julia Abigail Lynch	U.S. Geological Survey, National Climate Change and Wildlife Science Center	United States of America
	Patricio Pliscoff	Universidad Catolica de Chile	Chile
	Michelle Mei Ling Lim	Griffith University	International Social Science Council
	Selomane Odirilwe	Council for Scientific and Industrial Research (CSIR)	Council for Scientific and Industrial Research (CSIR)
	Assem Mohamed	Ministry of Agriculture and Land Reclamation (MALR), Agricultural Research Center (ARC), Central Laboratory for Agricultural Climate (CLAC).	Egypt
	Anna Sidorovich	The Scientific and Practical Centre for Bioresources of the National Academy of Sciences of Belarus	The Scientific and Practical Centre for Bioresources of the National Academy of Sciences of Belarus

Assessment	*Name*	*Affiliation*	*Nominating / Government Organisation*
	Alvaro Fernández-Llamazares Onrubia	University of Helsinki	University of Helsinki
	Aibek Samakov	Universität Tübingen	Universität Tübingen
	Uttam Babu Shrestha	University of Southern Queensland	Global Young Academy
	Rashad Salimov	Institute of Botany of ANAS	Institute of Botany of ANAS
	Tuyeni Heita Mwampamba	Institute of Ecosystems & Sustainability Research, National Autonomous University of Mexico	United Republic of Tanzania
	Lenke Balint	The Royal Society for the Protection of Birds (RSPB)	RSPB/Birdlife International
	Ivis Julieta Chan	Plantlife International	Plantlife International
	Pedro Jaureguiberry	National University of Cordoba	Inter-American Institute for Global Change Research

Appendix 2 – Concept note for the third meeting of the Capacity-building Forum

Engaging with capacity-building under IPBES

11. The work on capacity-building under IPBES is founded on the IPBES Capacity-building Rolling Plan, which establishes the principles, strategic directions and modalities for addressing the individual and institutional capacity-building needs identified by the IPBES Plenary. In order to effectively address these priority needs, the IPBES task force on capacity-building engage and collaborate with institutions undertaking relevant activities to align efforts and mobilise resources towards the implementation of the rolling plan. Contributions towards the implementation of the capacity-building rolling plan are recognised in the annex of the rolling plan, and reported to the IPBES Plenary.

12. The IPBES Capacity-building Forum is a key vehicle for increasing engagement and facilitating collaboration among partners for the implementation and further development of the rolling plan, and serves as an arena for cooperation between IPBES and other institutions that fund, undertake or otherwise contribute to relevant capacity-building activities. **Work under the forum aims to advance the joint agendas of partners and facilitate longer term strategic alignment of relevant ongoing programmes.** By providing an arena for dialogue and cross fertilisation of ideas, the forum endeavours to mobilise resources for the implementation of the rolling plan and add value to the work of partners through promoting new collaborations, stimulating cross-institutional learning and creating synergies between existing capacity-building initiatives.

The third meeting of the Capacity-building Forum

13. The third meeting of the Capacity-building Forum will build on experiences from the two meetings arranged to date and the fifth task force meeting, which focused on collaboration with partners in support of the rolling plan. It is envisioned that the meeting will be held in conjunction with the sixth task force meeting. Consideration will be given to organize the task force and the forum as a joint meeting. The meeting will build on existing partnerships by inviting new institutions to contribute to the implementation of the rolling plan and extending collaboration with current partners. Invited institutions will play an active role prior to and during the forum meeting by:

(a) Identifying how they can contribute to the implementation of the rolling plan, either through building upon the initiatives already being undertaken or starting new initiatives;

(b) Engaging in dialogues with the capacity-building task force and institutions present at the meeting to explore opportunities for alignment and collaboration; and

(c) Jointly developing concrete activities supporting the implementation of the rolling plan.

14. It is suggested to organise a two- to three-day forum in December 2018, in conjunction with the sixth meeting of the capacity-building task force. Venue has not been decided.

15. It is suggested to invite approximately 30 participants from three groups:

(a) Institutions already supporting the implementation of the capacity-building rolling plan;

(b) Institutions well-placed and interested in supporting the implementation of the rolling plan; and

(c) Capacity-building task force members.

16. The capacity-building task force will engage in bilateral dialogues with potential participants prior to the meeting to gauge their interest and inform the planning of the meeting. Recognising the importance of engaging with partners well in advance of the meeting, the task force recommends beginning to identify and engage potential invitees as soon as possible after the sixth session of the IPBES Plenary

17. The estimated budget for the meeting amounts to $30,000, based on experiences from earlier meetings with potential partners.

Appendix 3 – Regional dialogue meetings

Summary report: Regional dialogue meetings for the IPBES regional assessments on biodiversity and ecosystem services

Executive Summary

- **Four regional dialogue meetings between national focal points (NFPs) and IPBES experts for the IPBES Regional Assessments on Biodiversity and Ecosystem Services** were held in June-August 2017 with the aim to *strengthen government engagement in the production and use of the regional assessments, and to provide insight for assessment experts into how their assessment are perceived and received by Governments*.

- **Governments' involvement** in the production and use of IPBES deliverables is key to increase credibility, quality and legitimacy of assessments, ensure policy relevance, and stimulate ownership and uptake of assessment findings.

- The regional dialogue meetings are part of the work of the IPBES task force on capacity-building on further **enhancing national capacities for engaging in the production and uptake of IPBES assessments**, and have been **developed in response to needs reported by member States and IPBES experts**.

- Meeting participants, including IPBES experts, MEP/Bureau members and NFPs reported that they were very satisfied with the organisation and substantive discussions during the meeting. The evaluation survey shows that **all key indicators for evaluating the success of the meetings received an average rating above 8 on a rating scale from 1-10, with 10 being the top score**.

- Participants stressed the importance of dialogue and collaboration across the science-policy interface between IPBES experts and NFPs, noting that this strengthens knowledge and engagement, lowers threshold to contribute to review processes at regional and national level, and increases **sustained involvement and ownership of IPBES processes**.

- The regional dialogue meetings provided good platforms for **peer learning**. A large proportion of the NFPs suggested that more frequent meetings and interactions would lead to **more functional NFP networks** that are better equipped to share best practices and experiences to **strengthen national capacities for engaging in the production and use of IPBES deliverables**.

- **Further enhancing national capacities** for engaging in the production of IPBES deliverables and promoting their use and uptake into local, national and regional policy were seen as key for delivering the envisioned outcomes of IPBES.

1. Context and objectives

The four regional assessments (Africa, Americas, Asia Pacific and Europe and Central Asia) on biodiversity and ecosystem services are currently in their final year of production, and will be presented to the 6th session of the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) Plenary in March 2018. Following the external reviews (May-July) of the second order drafts of the assessment reports and the first order drafts of the summaries for policymakers (SPM), regional dialogue meetings were held in all regions with the aim *to strengthen government engagement in the production and use of the regional assessments, and to provide insight for assessment experts into how their assessment are perceived and received by Governments.*

The meetings were conducted as the third and main step of a three-step process to stimulate solid Government involvement and ownership in the production of the four regional assessments, as visualised below in figure 1.

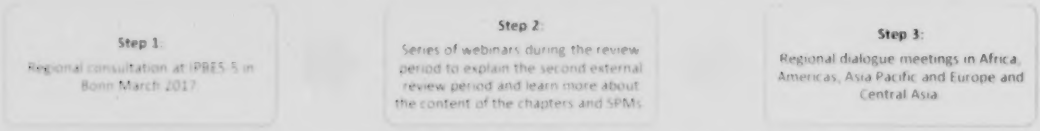

Step 1:
Regional consultation at IPBES-5 in Bonn March 2017
Step 2:
Series of webinars during the review period to explain the second external review period and learn more about the content of the chapters and SPMs
Step 3:
Regional dialogue meetings in Africa, Americas, Asia Pacific and Europe and Central Asia

Figure 1: Three-step process to strengthen Governments' engagement in the production of IPBES regional assessments

The regional dialogue meetings were organised jointly by the IPBES capacity-building task force and the management committees of the regional assessments, with the support of partner organisations. The meetings were arranged in response to requests from member States, and are part of the work of the capacity-building task force under IPBES Capacity-building Rolling Plan to further enhance Governments' capacities for engaging in the production and uptake of the regional assessments. Such engagement is essential for ensuring the policy relevance and impacts of the assessments. Supporting and facilitating this engagement is a key mandate of IPBES, and one that is of crucial importance for achieving the mission of strengthening the science-policy interface for biodiversity and ecosystem services.

Fruitful engagement across the science-policy interface is dependent on effective dialogue between national representatives to IPBES and the experts producing the assessments. In recognition of this, the meetings were designed to further enhance capacities for both assessment experts and national focal points (NFPs) through open and informal discussions. The specific objectives for the meetings were:

For Governments:

i. To better understand the content of the regional assessment
ii. To prepare for the approval process at IPBES-6 (March 2018)
iii. To prepare for the use of the regional assessment after IPBES-6

For assessment experts:

i. To understand how assessments are perceived and received by Governments
ii. To prepare for IPBES-6

The information summarised in the report below provides an overview of the structure and evaluation of the meeting and discussions related to the work on capacity-building under IPBES, hereunder identification of capacity-building needs related to national engagement in the production and use of the regional assessments.

2. Organization and participants

The four dialogue meetings were organised in the period June-August 2017[4], and were attended by a total of 76 NFPs[5], assessment co-chairs and a selected number of assessment authors. In addition to experts directly involved in the production of the assessments, members of the IPBES Bureau and Multidisciplinary Expert Panel (MEP), the IPBES task force on capacity-building and the secretariat participated in the meetings. The secretariat was supported by seven IPBES fellows participating in the meetings to learn about the science-policy interface activities of IPBES. The technical support units (TSUs) of the regional assessments were key contributors to the organisation and implementation of the meetings, in dialogue with the TSU on capacity-building.

Significant financial and in-kind contributions were leveraged for all meetings, including translation services for the meetings in Africa and the Americas, from a number organizations and institutions. All of these contributions are recognized as contributions to the implementation of the capacity-building rolling plan, and will be reported to IPBES-6. A brief overview of the four meetings are found in table 1 below. Meeting agendas and lists of participants per region can be found online on this link.

Table 1: Overview of regional dialogue meetings

Region	Place/Date	NFPs	IPBES Experts[6]	IPBES Secretariat	Local hosts/ contributing organisations
Europe and Central Asia	Vácrátót, Hungary, 12-14 June 2017[7]	19[8]	7	4	The Institute of Ecology and Botany of the Hungarian Centre for Ecological Research (MTA-Ok), French Foundation of Research on Biodiversity (FRB) and NeFo
Asia Pacific	Tokyo, Japan, 20-21 July 2017[9]	21[10]	14	4	The Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Ministry of Environment Japan (MoEJ), Asia-Pacific Network for Global Change Research (APN)
Africa	Addis Ababa, Ethiopia, 3-4 August 2017	19[11]	12	4	The Ethiopian Biodiversity Institute (EBI), Norwegian Environment Agency[12]
Americas	Cartagena, Colombia, 3-4 August 2017	17[13]	14	3	Norwegian Environment Agency[14]
Total		76	47	15	

[4] All meetings were originally planned during the second external review period in May 2017. However, with the exception of the regional dialogue meeting for the Europe and Central Asia Assessment that was organised as part of PESC-4, all meetings were rescheduled and held back-to-back with the assessments third author meetings to reduce costs and workload for experts.

[5] For countries without a designated IPBES national focal point, the invitation to the meeting was addressed to the CBD NFP.

[6] The IBES experts column includes members of the IPBES Bureau and MEP.

[7] The regional dialogue meeting for the ECA assessment was organized in conjunction with the fourth IPBES Pan-European Stakeholder Consultation (PESC-4). The total number of participants at PESC-4 was 61.

[8] In the Europe and Central Asia region, there are 39 member nations.

[9] The regional dialogue meeting for the Asia Pacific assessment was organised back to back with the workshop "Reinforcing capacities of governmental officials in the Asia- Pacific region" hosted by the Ministry of Environment in Japan and UNESCO.

[10] In the Asia-Pacific region, there are 26 member nations.

[11] In the Africa region, there are 37 member nations.

[12] The Norwegian Environment Agency covered the costs of simultaneous interpretation.

[13] In the Americas region, there are 25 member nations.

[14] The Norwegian Environment Agency covered the costs of simultaneous interpretation.

3. Agenda items

All four regional dialogue meetings were chaired by IPBES Bureau members from the respective regions, followed the same agenda and applied a similar structure and methodology. The meeting comprised four substantial agenda items: introduction to the regional assessment, learning from the second external review, preparing for the use and uptake of the regional assessment, and preparing for the approval process of the summary for policymakers at IPBES-6.

Introduction to the regional assessment

The assessment co-chairs presented the general scope of the IPBES regional assessments on biodiversity and ecosystem services; the specific scope for the respective regions; the draft Summary for Policymakers (SPM), including the structure of the SPM; the assessment of confidence; key messages of the draft SPM; and next steps for the assessment in question. Coordinating Lead Author (CLA) or Lead Author (LA) from each of the chapters presented the key findings of the chapters. These presentations were followed by informal discussions on how the draft SPM could be made more policy-relevant.

The following selected points on how the assessment report and the SPM could be made more policy-relevant were raised:

- NFPs may play a vital role in raising awareness and increasing engagement, thereby enabling uptake of the findings of the assessments;
- The establishment of national, sub-regional and regional networks, comprising IPBES NFPs and other relevant stakeholders, could facilitate exchange and strengthen common advocacy efforts;
- The SPMs should be closely connected to the livelihoods and climate change agenda and aligned with other mechanisms such as the Sustainable Development Goals (SDGs) to increase their relevance;
- The threat to biodiversity and ecosystem services should be clearly communicated through compelling evidence-based key messages and statistics for policy makers to make informed decisions and follow up with specific actions in national budgets;
- Policy options, including the need for capacity-building, financial resources, technology transfer and innovation in sustainable use of resources, should be presented clearly;
- Existing policy measures and lessons learnt from these, should be identified in the assessments to inform future policy actions; and
- Progress indicators should be developed in order to measure implementation of the assessment and related policy measures.

Learning from the second external review

The comments and experiences from the external review period were presented. Countries who had provided comments were invited to present their experiences from the review process (*e.g. who, or how many were involved in the process, timeframe, lessons learnt etc.*). The approaches applied in the review process varied considerably between countries and provided good discussions, peer learning and useful insights. Examples of processes established by national focal points to submit comments to the external review process for further peer-learning can be found in annex 1.

In the ECA regional dialogue meeting, which was organised in conjunction with the PESC-4 meeting during the review period, participants who had initiated the national review process shared their approach to arranging a national review process.

Preparing for the use and uptake of the regional assessment

IPBES' communication and outreach plan for the regional assessments as well as the lessons learnt from the pollination assessment were presented. The presentations were followed by discussion on approaches for enabling the use and uptake of the regional assessments.

The following selected points on approaches for enabling the use and uptake of the regional assessments were raised:

- Collaboration with regional and sub-regional institutions may strengthen policy implementation of the regional assessments and the SPM, both through establishing alliances for joint advocacy efforts and by making use of existing platforms and meetings to promote IPBES deliverables;
- The establishment of functional networks of NFPs, including the provision of technical and financial support for capacity-building, may stimulate peer learning, facilitate adoption of the regional assessments and drive policy implementation at the regional and national levels;
- Customization of the SPM, including translation to local languages, alignment to existing strategies and national action plans and definition of country specific advocacy, is vital to ensure uptake of assessment findings at the national level;
- The use of indigenous and local knowledge and increased focus on bottom-up approaches is necessary to ensure ownership, engagement and policy implementation at sub-national level;
- Efforts to promote uptake of the assessments at the national level should involve government actors beyond ministries in charge of environment to ensure buy-in and national budget commitment; and
- Effective media strategies, including communication of short and compelling policy-oriented messages through dissemination briefs, TV broadcasting, newspapers and social media, are needed to increase public awareness and engagement.

Preparing for the approval process of the SPM at IPBES-6

The next steps of the regional assessments and the organisation of the approval process were presented, and NFPs and assessment experts engaged in dialogue with questions and answers to plan and prepare for the upcoming process.

4. Evaluation

Meeting participants were asked to evaluate the meetings and identify national capacity-building needs related to the regional assessments. Answers from the survey are used to a) inform design, planning and implementation of potential future dialogue meetings; and b) develop activities under the capacity-building rolling plan aimed at further enhancing national capacities for engaging with the production and uptake of the regional assessments.

A summary analysis of the questionnaire responses and the rating on different aspects of the meeting[15] is provided below.

Overall feedback on the regional dialogue meetings

Participants reported that they were well satisfied with the meeting, giving an overall rating of 8.7 on a 10-point scale.

[15] The rating scale applied in all graphs goes from 1-10, with 10 being the top score.

The provision of simultaneous translation at the regional dialogue meetings in the Africa and the Americas region was particularly highlighted as a key factor for ensuring successful dialogues, and it was noted that future meetings in these regions would benefit greatly by provision of the same services. Relatedly, several participants from Africa reported that lack of access to documents in French resulted in more time spent gaining initial understanding of the assessment. French-speaking participants further pointed out that they have a disadvantage since they are unable to access the same information as English-speaking participants. Suggestions to address this included translating the supporting documents into French, sharing the translated presentations in advance, and producing short summaries and key messages in French.

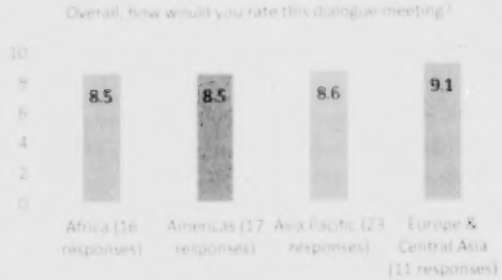


Figure 2: Overall rating of the regional dialogue meetings

Participants across all regions reported that the meeting was a great opportunity for dialogue across the science-policy interface between and assessment experts and government representatives as illustrated in figure 3. Government representatives from the ECA region commented that it was very useful to have the dialogue meeting during the external review as the discussions with IPBES experts and other NFPs enabled them to give more valuable input during the review. This was also reflected in comments from participants from all other regions, who would have preferred that the regional dialogue meetings be held in advance of or early in the review process to enable government representatives to apply the learning from the meeting when commenting on the chapters and the SPM.

Emphasising the importance of exchange and dialogue, participants reported that the meeting provided an important platform for learning from peers, allowing for exchange of experiences on the review process among countries and experts. Several participants suggested that the meetings could be scaled up to include more NFPs and government representatives, and that key actors should be given even more time to report on their experiences and their approaches on the review process to increase mutual learning. It was also suggested that the dialogue could include more experts and other relevant stakeholders from countries where best-practice examples are available.

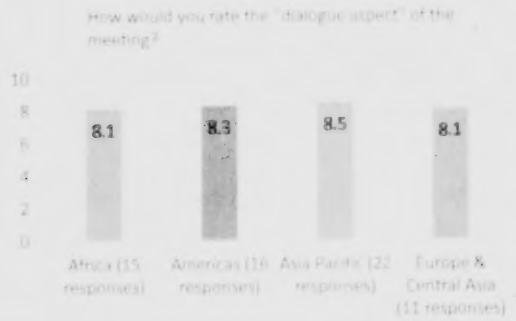


Figure 3: Rating of the "dialogue" aspect of the meeting

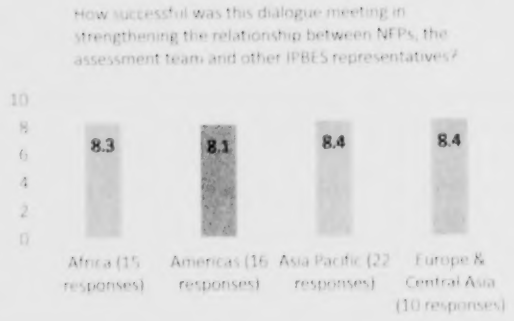


Figure 4: The relationship among the NFPs, the assessment team and other IPBES representatives

Participants noted that the dialogue improved relationship, hereunder, understanding of the roles and expectations of the NFPs as well as the limitations faced by assessment experts, reflected in figure 4.

It was recommended that additional science-policy dialogues aimed at strengthening regional networks and further enhancing capacities of NFPs to engage in production and uptake of IPBES products be included as a key stream of work under the capacity-building rolling plan. Specific activities included organising another set of dialogue meetings ahead of IPBES-6 to discuss the regional assessments and a webinar before the assessment report is finalised. Participants suggested that more frequent meetings would lead to more functional NFP networks that are better equipped to share best practices and experiences. It was further suggested that the specific capacity-building needs of the NFPs be mapped, and that efforts should be undertaken to support networks amongst focal points to facilitate regional collaboration ahead of IPBES – 6.

Introduction to the regional assessment

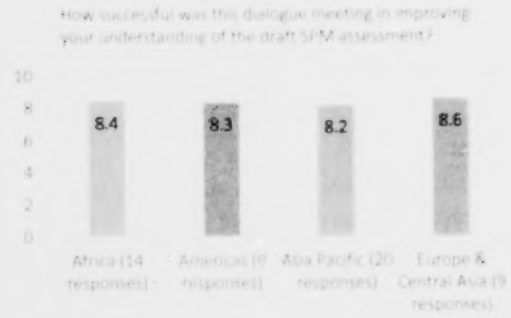


Figure 5. Understanding of the draft SPM assessment (NFPs)

As reflected in figure 5, participants reported that the meeting improved their understanding of the regional assessment on many levels, including on specific findings and policy recommendations, overlaps and synergies between chapters, best practices and experiences on facilitating external review at country level (including stakeholder engagement processes), and the process ahead.

Learning from the second external review

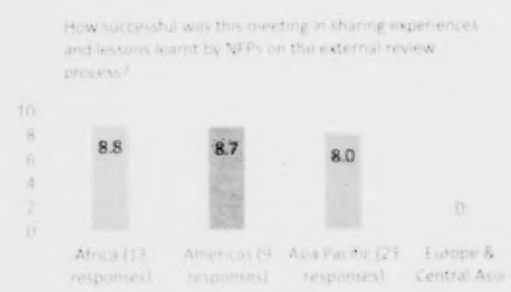


Figure 6. Sharing experiences and lessons learnt by NFPs on the external review process (government representative)

As demonstrated in figure 6, participants expressed great appreciation of the presentations from the NFPs about their experiences of involvement in the second order draft review process[16]. The related discussions on challenges and good practices in the review process and possible use of the assessment results in national policies were also highlighted as particularly useful.

[16] NFPs, who had provided comments during the external review period, were invited to present their experiences from the review process.

Preparing for the approval process of the SPM at IPBES-6

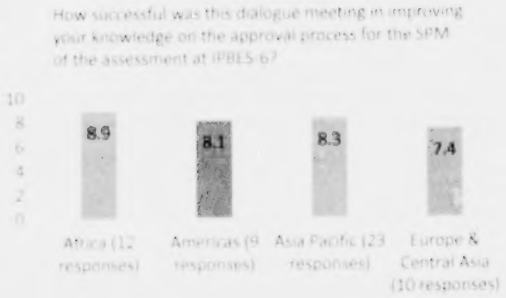


Figure 7. Improvement of knowledge on the approval process for the SPM of the assessment at IPBES-6

The average score for the improvement of knowledge on the approval process for the SPM of the assessment at IPBES-6 was 8.2, indicating that the information presented in this session was useful and that it will be helpful in order to plan and prepare for the upcoming process.

Preparing for the use and uptake of the regional assessment

Participants were asked to provide feedback on the main challenges related to the uptake and use of the regional assessments in their respective countries, and the capacity building needed to address these challenges. The feedback from the participants will feed into the stream of work under the capacity-building rolling plan focused on further enhancing national and regional capacities for engaging in the production and use of the regional assessments (see table 2).

Table 2: Challenges and capacity building needs activities related to use and uptake of the regional assessments – Summary of feedback from NFPs

Main challenges identified related to use and uptake of the regional assessments	Capacity-building needs/activities to address the identified challenges
• Too general messages with weak supporting evidence • Too diverse issues making it difficult to extract the relevant information/key messages at country level. • Key messages are not available in local languages	• Develop clear and hard-hitting key messages on loss of biodiversity (to generate same effect as the message on climate change) • Translate key messages to different languages (in addition to the 6 UN languages)
• Difficult to demonstrate the relevance of key messages and the importance of the assessment at national and sub-national level • Lack of capacity to adapt/customise policy options at the country level (adaptation) • Lack of capacity (human and financial) for implementation • Challenges relating to launching national level assessments building upon the regional assessment	• Strengthen knowledge about IPBES and the relationship between IPBES and NFPs / NFP engagement • Organise capacity-building workshops and meetings for NFPs/decision makers • Demonstrate examples on how the report can be translated into policy • Develop protocol or best management practice to support take-up of key messages • Organise science-policy dialogue meetings at national and sub-national level • Enable regional learning and support networks
• Lack of Involvement by stakeholders at local and national levels.	• Develop a robust communication strategy for dissemination of the assessment and for engaging stakeholders.

• Lack of ownership and low capacity of key institutions/sectors for implementation and uptake	• Establish fora for dissemination, raising awareness and for promoting uptake. • Collaborate with other relevant actors on projects and activities (including co financing). • Work with public institutions and civil society to ensure ownership and buy-in • Initiate awareness raising initiatives • Integrate measures/policies into other sectors
• Lack of political will and commitment	• Develop sensitising strategy to build capacity of and engage high-level officers. • Organise sensitising workshops/meetings for decision makers, including relevant ministries and government members • Develop strategy on how to address politically sensitive issues • Organise workshop for authors with journalists/other professionals on how to present these type of sensitive but important findings

5. Summary

This section summarises the evaluation and main outputs from the meeting of relevance for the further work on capacity-building under the auspices of IPBES.

- Participants stressed the importance of dialogue and collaboration across the science-policy interface between IPBES experts and NFPs, noting that this strengthens knowledge and engagement, lowers threshold to contribute to review processes at regional and national level, and increases **sustained involvement and ownership to the IPBES processes**.

- It was noted that the regional dialogue meetings provided good platforms for **peer learning**. A large proportion of the NFPs suggested that more frequent meetings and interactions would lead to more **functional NFP networks** that are better equipped to share best practices and experiences to strengthen national capacities for engaging in the production and use of IPBES deliverables.

- **Language** was flagged as a debilitating factor hampering the ability to engage in IPBES processes, particularly in Africa. It was argued that in order to facilitate national engagement in all regions it is crucial to develop materials in all UN languages and provide translation services during meetings.

- Participants recommended organising **future dialogue meetings during** or ahead of external review periods to ensure maximum benefits for both IPBES experts and NFPs.

- The main identified **challenges related to the uptake and use** of the regional assessments include lack of capacity, lack of political will, ownership and buy-in at national level. Furthermore, the general nature of the regional assessments makes uptake of assessment findings difficult as customised key messages and suggestions for specific policy actions are needed for successful advocacy efforts.

- **Further enhancing national capacities** for engaging in the production of IPBES deliverables and promoting their use and uptake into local, national and regional policy is seen as key for delivering the envisioned outcomes of IPBES.

Science and Policy for People and Nature

Annex 1 (Summary report: Regional Dialogue Meetings):

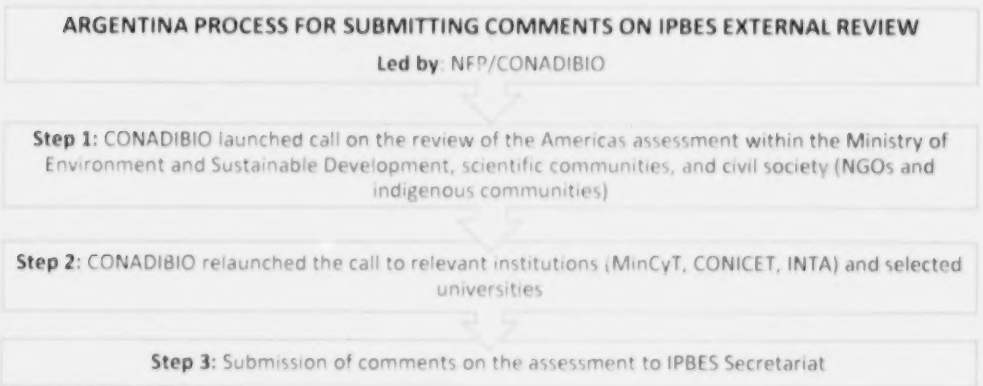
Examples of national processes established by National Focal Points to submit comments to the IPBES external review process

Governments' involvement is key to increase credibility, quality and legitimacy of the IPBES assessments, ensure policy relevance, and stimulate ownership and uptake of assessment findings. During the regional dialogue meetings the countries who had submitted comments under the external review process of the second order draft the ongoing regional assessments on biodiversity and ecosystem services were invited to share their experiences. The approaches applied varied considerably between countries, both with regards to time and resources invested, methods applied, as well as the number and type of stakeholders involved.

The summarised versions of the processes established by NFPs in the external review demonstrate the breadth of approaches and might serve as inspiration for future IPBES external review processes.

Example of Argentina

The National Advisory Commission for the Conservation and Sustainable Use of Biological Diversity (CONADIBIO) in Argentina launched a call to inform scientific communities, civil society, and the Ministry of Environment and Sustainable Development about the review of the Americas assessment. In addition, the CONADIBIO made a target call to the Ministry of Science, Technology and Productive Innovation (MinCyT), the National Scientific and Technical Research Council (CONICET), the National Agricultural Technology Institute (INTA) and relevant universities. In the call, the experts were asked to submit comments directly to the IPBES Secretariat with copy to CONADIBIO to enable follow-up action. The national process of Argentina is described in the figure below.


ARGENTINA PROCESS FOR SUBMITTING COMMENTS ON IPBES EXTERNAL REVIEW
Led by: NFP/CONADIBIO
Step 1: CONADIBIO launched call on the review of the Americas assessment within the Ministry of Environment and Sustainable Development, scientific communities, and civil society (NGOs and indigenous communities)
Step 2: CONADIBIO relaunched the call to relevant institutions (MinCyT, CONICET, INTA) and selected universities
Step 3: Submission of comments on the assessment to IPBES Secretariat

Example of China

The NFP of China and the Nature and Ecology Conservation Department of the Ministry of Environmental Protection initiated the external review process of IPBES assessments by a process to select and invite relevant experts to contribute to the review. The selected experts were given three weeks to review the report and their contributions were compiled in the first draft of comments. The NFP organised a national workshop to further refine comments. The Government reviewed the second draft of comments and submitted their comments to the IPBES Asia Pacific Technical Support Unit (AP TSU). Figure below presents the steps in the national review process in China.

CHINA PROCESS FOR SUBMITTING COMMENTS ON IPBES EXTERNAL REVIEW

Led by: NFP/ the Nature and Ecology Conservation Department of the Ministry of Environmental Protection

Step 1: Invite relevant experts to participate the external review process

Step 2: Review by invited experts, three weeks

Step 3: Summarization of comments, development of first draft

Step 4: Discussion in national workshop with scientists, policy makers, and other stakeholders involve in, development of second draft

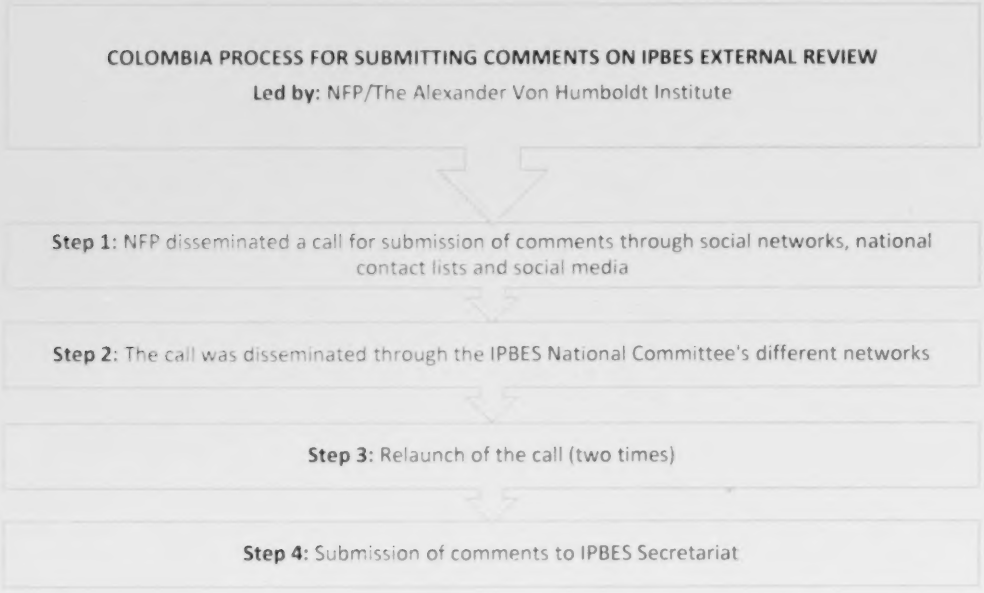
Step 5: Review of the second draft of comments by Government before submission to IPBES

Step 6: Submission of comments to IPBES AP TSU

Step 7: Follow-up on process

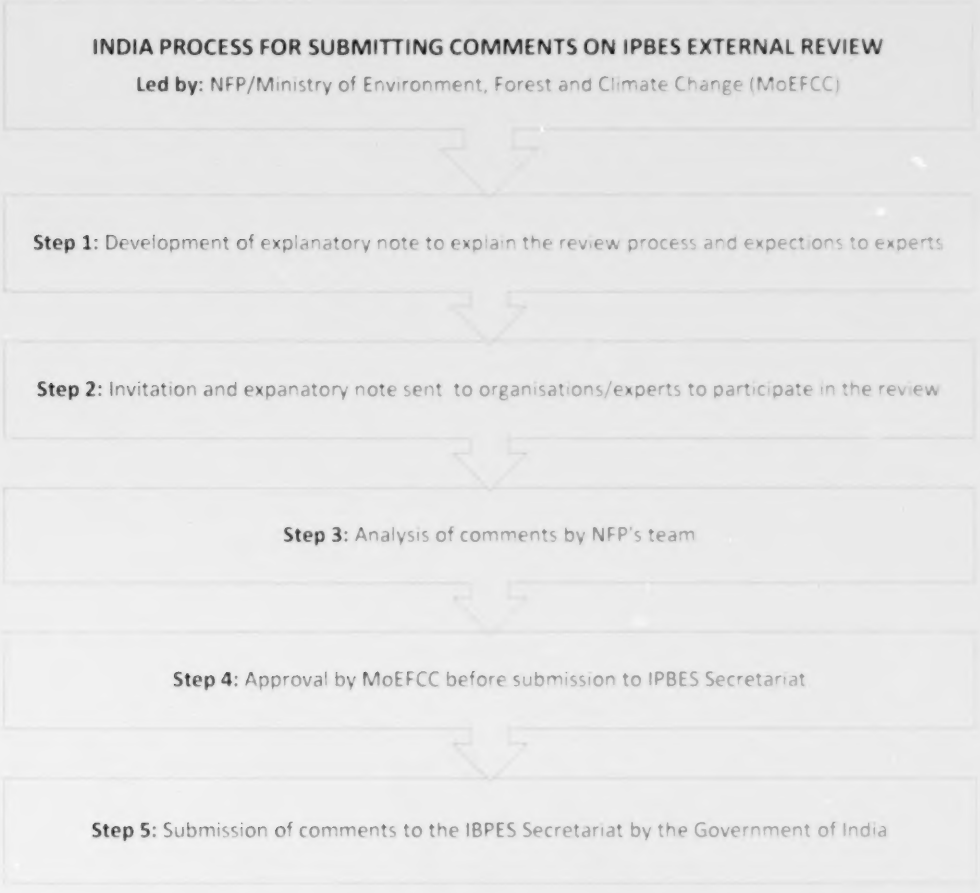
Example of Colombia

The NFP of Colombia launched a broad call on the review process using different outreach approaches through e.g. social networks, national contact lists and the IPBES National Committee. The aim was to reach out to as many interested parties as possible, to disseminate the call widely and to give the experts freedom to respond as they saw fit. The approach taken by Colombia is presented in the figure below.


COLOMBIA PROCESS FOR SUBMITTING COMMENTS ON IPBES EXTERNAL REVIEW
Led by: NFP/The Alexander Von Humboldt Institute
Step 1: NFP disseminated a call for submission of comments through social networks, national contact lists and social media
Step 2: The call was disseminated through the IPBES National Committee's different networks
Step 3: Relaunch of the call (two times)
Step 4: Submission of comments to IPBES Secretariat

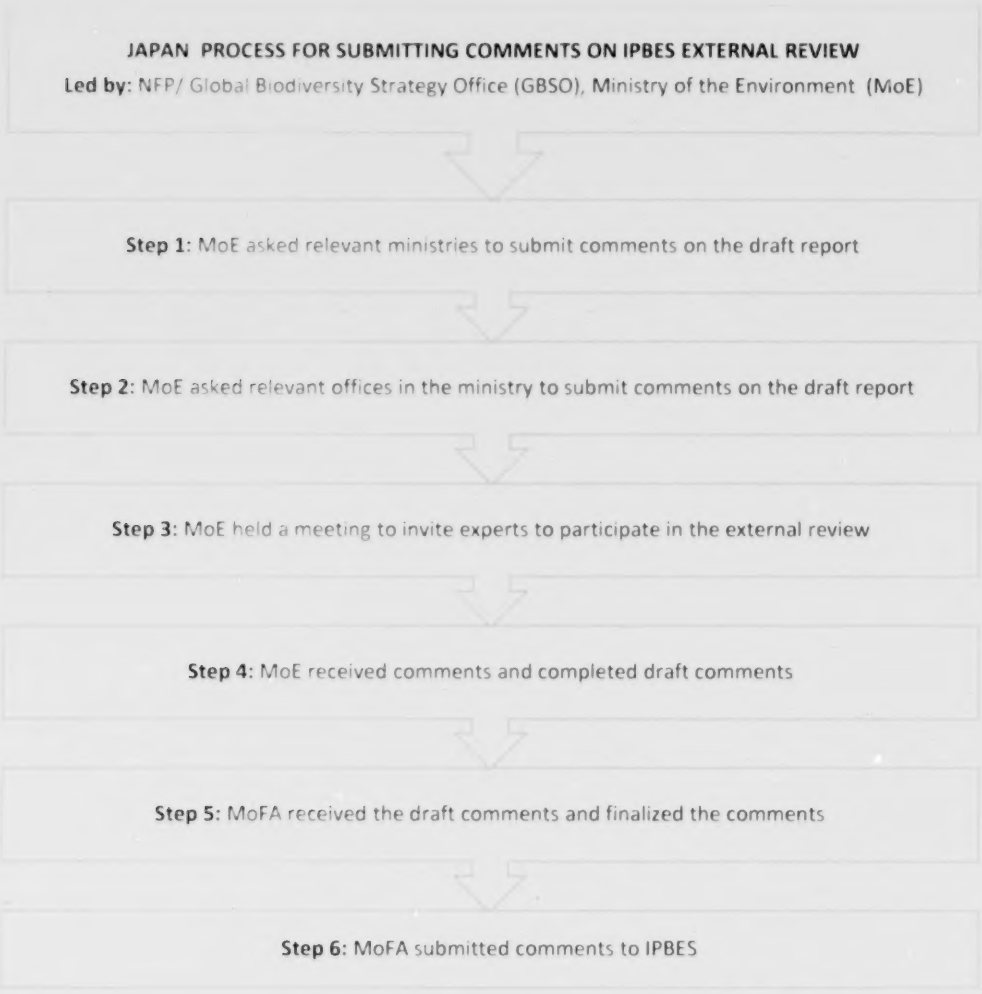
Example of India

In preparation for the review process, the NFP of India developed an explanatory note that was attached to the call inviting organisations/experts to participate in the review process. The experts were encouraged to widely disseminate the call in their networks and to submit comments directly to IPBES Secretariat and/or to Ministry of Environment, Forest and Climate Change (MoEFSS) as input to prepare India's official responses to IPBES. Prior to the submission of comments to the IPBES Secretariat, the NFP's team examined and analysed the comments received from experts, focusing on information relevant for India. The whole national process took two months and is visualized in the figure below.


INDIA PROCESS FOR SUBMITTING COMMENTS ON IPBES EXTERNAL REVIEW
Led by: NFP/Ministry of Environment, Forest and Climate Change (MoEFCC)
Step 1: Development of explanatory note to explain the review process and expections to experts
Step 2: Invitation and expanatory note sent to organisations/experts to participate in the review
Step 3: Analysis of comments by NFP's team
Step 4: Approval by MoEFCC before submission to IPBES Secretariat
Step 5: Submission of comments to the IBPES Secretariat by the Government of India

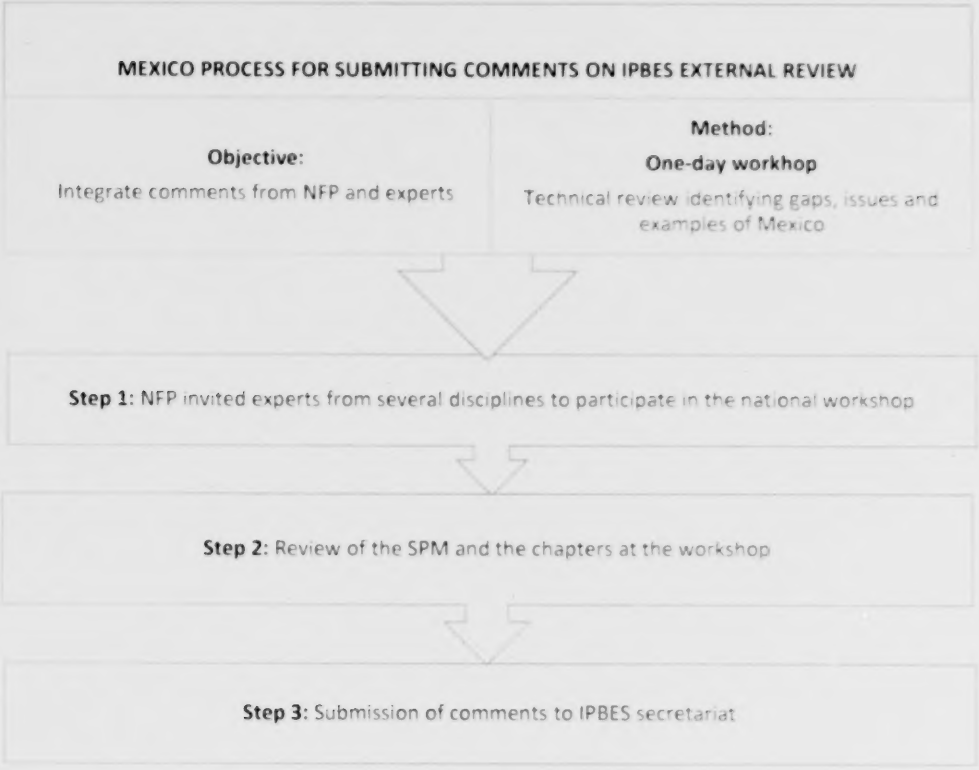
Example of Japan

The Global Biodiversity Strategy Office (GBSO) of the Ministry of the Environment (MoE), initiated the national process for submitting comments in the IPBES external review by asking relevant ministries to submit comments to the draft Asia Pacific assessment. The MoE highlighted relevant paragraphs to be reviewed by indicated departments and divisions and followed up with specific departments in relevant ministries. In addition, MoE held a meeting for experts providing information on the process. MoE prepared a draft government review based on the comments received by the ministries and presented the draft to the Ministry of Foreign Affairs (MoFA) for final approval and submission to IPBES secretariat, as outlined below in the figure.


JAPAN PROCESS FOR SUBMITTING COMMENTS ON IPBES EXTERNAL REVIEW
Led by: NFP/ Global Biodiversity Strategy Office (GBSO), Ministry of the Environment (MoE)
Step 1: MoE asked relevant ministries to submit comments on the draft report
Step 2: MoE asked relevant offices in the ministry to submit comments on the draft report
Step 3: MoE held a meeting to invite experts to participate in the external review
Step 4: MoE received comments and completed draft comments
Step 5: MoFA received the draft comments and finalized the comments
Step 6: MoFA submitted comments to IPBES

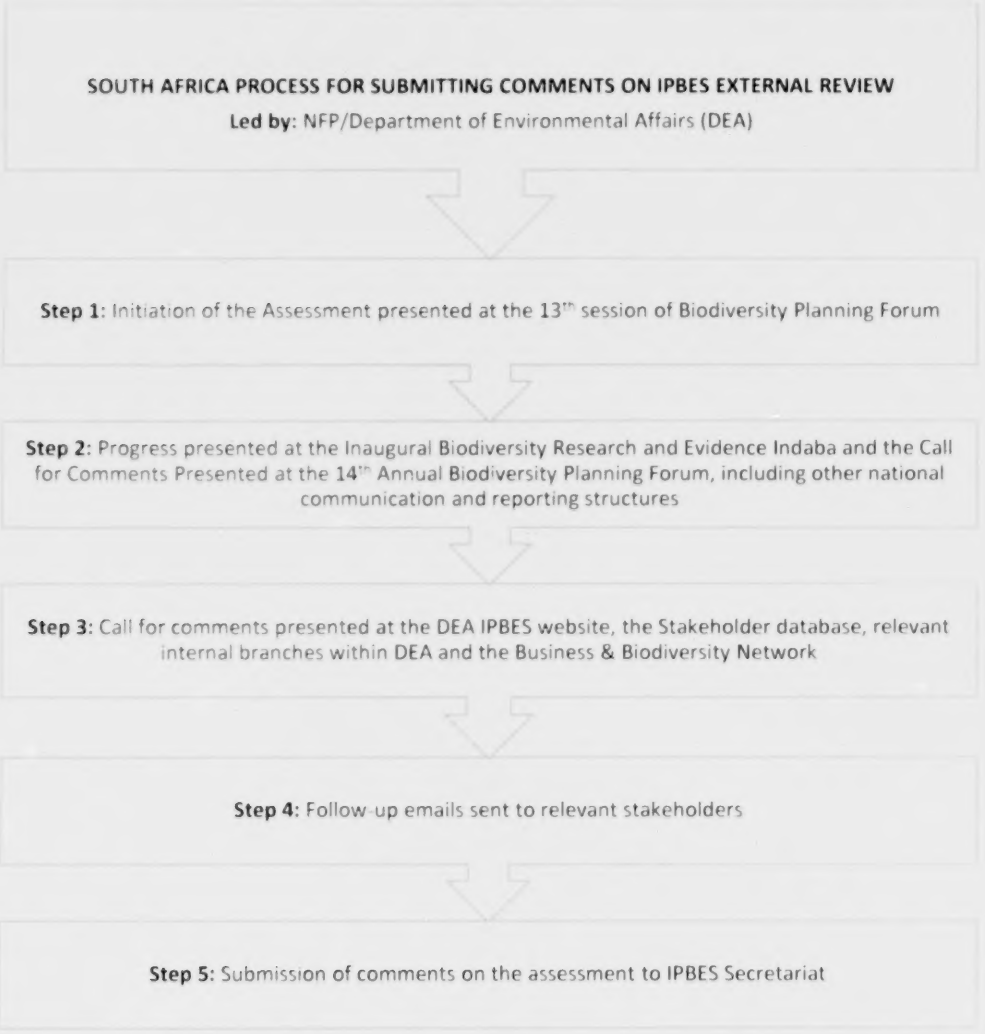
Example of Mexico

Mexico organized a national workshop inviting experts from several disciplines (earth and social sciences) to integrate comments from NFPs and experts in the Americas assessment. The experts were asked to review the draft Summary for Policymakers (SPM) and the chapters of the Americas assessment and to prepare and/or submit their comments prior to the workshop. At the workshop experts were requested to technically review and evaluate the contents of the chapters and SPM, and provide specific comments identifying gaps, issues, and examples from Mexico. The figure below presents the steps in the national process of Mexico.


MEXICO PROCESS FOR SUBMITTING COMMENTS ON IPBES EXTERNAL REVIEW
Objective:
Integrate comments from NFP and experts
Method:
One-day workhop
Technical review identifying gaps, issues and examples of Mexico
Step 1: NFP invited experts from several disciplines to participate in the national workshop
Step 2: Review of the SPM and the chapters at the workshop
Step 3: Submission of comments to IPBES secretariat

Example of South Africa

On-going work to produce the Africa assessment was presented at the 13th session of Biodiversity Planning Forum of South Africa & the Inaugural Biodiversity Research & Evidence Indaba. The focus was to engage the experts and other stakeholders particularly the science policy fraternity on the assessment process from the beginning. The call for submitting comments on the IPBES assessment was presented at the 14th session of the Biodiversity Planning Forum. Moreover, the call was distributed through many different channels as listed in figure below describing the process and actions taken by South Africa on the review process of IPBES assessments.


SOUTH AFRICA PROCESS FOR SUBMITTING COMMENTS ON IPBES EXTERNAL REVIEW
Led by: NFP/Department of Environmental Affairs (DEA)
Step 1: Initiation of the Assessment presented at the 13th session of Biodiversity Planning Forum
Step 2: Progress presented at the Inaugural Biodiversity Research and Evidence Indaba and the Call for Comments Presented at the 14th Annual Biodiversity Planning Forum, including other national communication and reporting structures
Step 3: Call for comments presented at the DEA IPBES website, the Stakeholder database, relevant internal branches within DEA and the Business & Biodiversity Network
Step 4: Follow-up emails sent to relevant stakeholders
Step 5: Submission of comments on the assessment to IPBES Secretariat

Example of South Korea

The South Korea national process on submitting comments on the draft Asia Pacific assessment was led by the Ministry of Environment (designated IPBES National Focal Point), and the National Institute of Ecology (NIE). The first step of the process, as visualized in figure 8 below was to develop a review methodology. Following this step, the scientific expertise requirements for each chapter were identified and process of identifying experts took place. Experts with the required expertise were invited to review the Asia Pacific assessment and to submit their comments. In South Korea, main review points were the completeness of the report, representativeness of the Asia-Pacific region, parts that needed more explanation or information, and cases by country. The national process is illustrated in the figure below.

SOUTH KOREA PROCESS FOR SUBMITTING COMMENTS ON IPBES EXTERNAL REVIEW
Led by: NFP/Ministry of Environment and National Institute of Ecology (NIE)
Step 1: Develop review methodology
Step 2: Identify specific expertise required for reviewing each chapter
Step 4: Identify the experts with the required expertise
Step 5: Invite the experts to participate in the review and to submit comments
Step 6: Develop Government review comments and submit to IPBES Secretariat

Appendix 4 – Contributing organisations/institutions and actions implementing the IPBES capacity-building rolling plan

The task force is undertaking an incremental approach to building collaboration and engagement with the wide range of organisations and institutions involved in capacity-building activities relating directly to the IPBES work programme and the identified priority capacity-building needs approved by the IPBES Plenary. There is an open invitation to all institutions looking to contribute to IPBES' work on capacity-building on the capacity-building page of www.IPBES.net.

A list of contributing organisations and institutions can be found below.

Activities and contributions to the implementation of the IPBES capacity-building rolling plan are listed in an annex of actions to the IPBES capacity-building rolling plan. A simplified version of this annex of actions is provided in table 1 below. The table includes activities planned and implemented by IPBES[17] and partners, including complementary capacity-building activities by other organisations and institutions. Activities by partners are self-reported and based on the priorities and criteria for implementing the strategies under the rolling plan. The strategies under the capacity-building rolling plan are (1) learning and engagement, (2) facilitating access to expertise and information, and (3) strengthening national and regional capacities.

The capacity-building task force aims to continuously update and make available a comprehensive list of actions on the IPBES website.

List of contributing organisations/institutions

Organisation Institution	*Acronym*
Addis Ababa University	AAU
African Biodiversity Network	ABN
Asia-Pacific Network for Global Change Research	APN
Association of Southeast Asian Nations (ASEAN) Centre for Biodiversity	ACB
Basque Centre for Climate Change	BC3
Centre for Resource Management and Environmental Studies, University of the West Indies	CERMES, UWI
Department of Life Sciences, The University of the West Indies	Department of Life Sciences, UWI
Deutsche Gesellschaft für Internationale Zusammenarbeit - ValuES	GIZ
Ecosystem Services Partnership	ESP
Forest Peoples Programme	FPP
French Foundation of Research on Biodiversity	FRB
Fundación para la Conservación de los Recursos Naturales y Ambiente en Guatemala	FCG
Future Earth	FE
German Network-Forum for Biodiversity Research	NeFo
Global Biodiversity Information Facility	GBIF
Helmholtz Centre for Environmental Research	UFZ
Institute for Biodiversity - Network e.V.	IBN
Institute for Global Environmental Strategies	IGES
Institute of Ecology and Botany of the Hungarian Centre for Ecological Research	MTA-ÖK
Inter-American Institute for Global Change Research	IAI
International Union for Conservation of Nature	IUCN

[17] IPBES includes all relevant subsidiary bodies under IPBES contributing to the capacity-building activities, including bureau, the multidisciplinary expert panel, task forces, expert groups, the assessment management committees, and the secretariat, including technical support units.

Organisation Institution	*Acronym*
Ministry of Environment Japan	MoEJ
Ministry of Forestry and Water Affairs in Turkey	MoFWA
Norwegian Environment Agency	NEA
Norwegian Institute of Marine Research	IMR
Secretariat of the Convention on Biological Diversity	SCBD
South African National Biodiversity Institute	SANBI
Stockholm Resilience Centre - SwedBio	SRC , SwedBio
The Ethiopian Biodiversity Institute	EBI
The Japan Agency for Marine-Earth Science and Technology	JAMSTEC
United Nations Development Programme, Biodiversity and Ecosystem Services Network	UNDP, BES-Net
United Nations Environment Programme World Conservation Monitoring Centre	UNEP WCMC
United Nations University Institute for the Advanced Study of Sustainability	UNU-IAS
University of Trinidad and Tobago	UTT
West African Biodiversity and Ecosystem Services	WABES
Wildlife Institute of India	WII
Center for Development Research, University of Bonn	ZEF

Table 1
List of activities implementing the IPBES capacity-building rolling plan[18]

Strategy	*Initiative*	*Activity*	*Time*	*Lead organisation and partner(s)*	*Type of contribution*	*Region*
Strategy 1: Learning & Engagement	IPBES fellowship programme	Call for fellows and selection of fellows (IPBES land degradation and restoration assessment and four IPBES regional assessments)	2015	MEP, and assessment management committees	IPBES trust fund	Global
		Fellows' day: First introduction to IPBES and its assessment processes and the fellowship programme prior to the land degradation and restoration assessment first author meeting	2015	IPBES capacity-building task force, with support from the assessment authors	IPBES trust fund	Global
		Fellows workshop: Objectives: 1) to develop a learning network amongst the IPBES fellows; 2) to share lessons and reflections from the first author meetings; and 3) to ensure that the fellows have an understanding of the ecosystem assessment process and how assessments can be utilised	2015	IPBES capacity-building task force, with support from the assessment authors	IPBES trust fund	Global
		Fellows' day for the fellows of the global assessment: First introduction to IPBES and the fellowship programme. Experience sharing with existing fellows	2016	IPBES capacity-building task force, with support from the assessment team	IPBES trust fund	Global

[18] Abbreviations used in table: BDI Biodiversity Informatics, CB- Capacity-building, CBMIS - Community Based Monitoring and Information Systems, ECA - Europe and Central Asia, ECS- Early Career Scientists, GA- Global assessment, ILK- Indigenous and Local Knowledge, IPLC- Indigenous Peoples and Local Communities, LDR- Land Degradation and Restoration, MC- Management Committee, MEP- Multidisciplinary Expert Panel, NEA-DE- National ecosystem assessment of Germany, PESC-4- 4th Pan-European IPBES Stakeholder Consultation, RCT - Regional Centres of Expertise, SPI- Science Policy Interface, SPM- Summary for Policymakers, TF- Task Force, TSU- Technical Support Unit.

Strategy	*Initiative*	*Activity*	*Time*	*Lead organisation and partner(s)*	*Type of contribution*	*Region*
		Call for fellows and selection of fellows (IPBES Global assessment)	2016	IPBES MEP, management committee of the global assessment	IPBES trust fund	Global
		Fellows' workshop: Workshop to strengthen fellows' capacity to contribute to their respective assessments through training and exchange of experiences among fellows on all the assessments	2017	IPBES capacity-building task force, with support from the assessment authors and the Basque Centre for Climate Change	IPBES trust fund & in-kind contribution	Global
		Fellows' participation in author meetings (first author meeting, second author meeting, third author meeting and chapter meeting of the land degradation and restoration, global and regional assessments)	Ongoing	IPBES	IPBES trust fund	Global
		Fellows' workshop: Training workshop focusing on the policy side of the science-policy interface. Fellows of the land degradation and restoration, global and regional assessments. To be held in Medellin, Colombia in March 2018	2018	IPBES, with support from the Norwegian Environment Agency and Future Earth	IPBES trust fund & in-kind contribution	Global
		Project: IPBES GA Fellows-Future Earth Workshop, Medellin, Colombia in March 2018. The project aims to shape transformative thinking for the future of biodiversity and human well-being by engaging stakeholders and policy-makers through a focus on culture and the arts	2018	IPBES fellows of the global assessment, capacity-building task force, with support from Future Earth and the Norwegian Environment Agency	IPBES trust fund & in-kind contribution	Global
		Promote the Fellowship programme to our members/networks and at ESP's World and Regional conferences (emphasis on engagement of young ES-scientists (sub-group within ESP called YESS)	Ongoing	Ecosystem Services Partnership (ESP)	In-kind contribution	Global
	Support increased use and development of IPBES learning materials for capacity-building	IPBES e-learning to strengthen knowledge on IPBES and its deliverables	Ongoing	IPBES capacity-building task force and UNEP WCMC	IPBES trust fund & in-kind contribution	Global
		IPBES webinars to strengthen knowledge on IPBES and its deliverables	Ongoing	IPBES capacity-building task force and assessment experts	IPBES trust fund	Global
	Capacity-development activities in support of the ongoing IPBES assessments	Workshop in support of the scenarios and models chapters of the regional assessments of biodiversity and ecosystem services and of the land degradation and restoration assessment	2016	IPBES (scenarios and models management committee, with support from the capacity-building task force	IPBES trust fund	Global
		Capacity-development writing workshop for the Europe and Central Asia assessment to build experts' capacities through hands-on training	2017	IPBES capacity-building task force and the management committee of the Europe and Central Asia assessment, with support from the Ministry of Forestry and Water Affairs in Turkey	IPBES trust fund & in-kind contribution	Western European and other States, Eastern European States, Asia Pacific States
		Capacity-development writing workshops for the Africa regional	2017	IPBES capacity-building task force, and the	IPBES trust fund & in-	African States

Strategy	*Initiative*	*Activity*	*Time*	*Lead organisation and partner(s)*	*Type of contribution*	*Region*
		assessment to build experts' capacities through hands-on training		management committee of the Africa assessment, with support from the Norwegian Environment Agency	kind contribution	
		Capacity-building workshop to develop summary for policy makers on the land degradation and restoration and the regional assessments (Africa, Asia Pacific and Americas)	2017	IPBES capacity-building task force, with support from the participating assessments, with support from the Norwegian Environment Agency	IPBES trust fund & in-kind contribution	Global
		Capacity-building workshop to develop summary for policymakers on the global assessment	2018	Management committee of the IPBES global assessment, with support from the capacity-building task force and the Norwegian Environment Agency	IPBES trust fund & in-kind contribution	Global
		Capacity-building sessions at 3rd Pan-European IPBES Stakeholder Consultation (PESC-3) meeting for European and Central Asian stakeholders to comment on the first order draft of the European and Central Asia assessment	2016	NeFo, FRB and partners (Belspo, Swiss biodiversity forum, and IPBES-pt)	In-kind contribution	Western European and other States, Asia Pacific States
		Capacity-building sessions at 4th Pan-European IPBES Stakeholder Consultation (PESC-4) meeting for European and Central Asian stakeholders to comment on the second order draft of the European and Central Asia assessment	2017	FRB, MEA-OK, NeFo, with support of IPBES capacity-building task force and the management committee of the Europe and Central Asia assessment	In-kind contribution	Western European and other States, Asia Pacific States
		Capacity-building session for French stakeholders to comment on the second order draft of the land degradation and restoration assessment	2017	FRB	In-kind contribution	Western European and other States
	Strengthen science-policy interface on biodiversity and ecosystem services	Americas regional dialogue meeting: 2- day meeting to strengthen government engagement in the production and use of the regional assessments, and to provide insight for assessment experts into how their assessment are perceived and received by Governments	2017	IPBES bureau, IPBES capacity-building task force, and the management committee of the Americas assessment, with support from the Norwegian Environment Agency	IPBES trust fund & in-kind contribution	Latin American and Caribbean States
		Asia Pacific regional dialogue meeting: 2- day meeting to strengthen government engagement in the production and use of the regional assessments, and to provide insight for assessment experts into how their assessment are perceived and received by Governments	2017	IPBES bureau, IPBES capacity-building task force, and the management committee of the Asia Pacific assessment and partners (JAMSTEC, MoEJ, IGES and APN)	IPBES trust fund & in-kind contribution	Asia Pacific States
		Africa regional dialogue meeting: 2-day meeting to strengthen government engagement in the production and use of the regional assessments, and to provide insight for assessment experts into how their assessment are perceived and received by Governments	2017	IPBES bureau, IPBES capacity-building task force, and the management committee of the Africa assessment and partners (EBI and Norwegian Environment Agency)	IPBES trust fund & in-kind contribution	African States

Strategy	*Initiative*	*Activity*	*Time*	*Lead organisation and partner(s)*	*Type of contribution*	*Region*
		Europe and Central Asia regional dialogue meeting: 2- day meeting to strengthen government engagement in the production and use of the regional assessments, and to provide insight for assessment experts into how their assessment are perceived and received by Governments	2017	IPBES bureau, IPBES capacity-building task force and its TSU, and the management committee of the Europe and Central Asia assessment and partners (MTA-ÖK, ERB and NeFo)	IPBES trust fund & in-kind contribution	Western European and other States, Eastern European States, Asia Pacific States
		Supporting the IPBES fellowship programme and the training and familiarization activities, incl. adding an IPBES component to IAI's workshop	Ongoing	Inter-American Institute for Global Change Research (IAI)	In-kind contribution	Latin American and Caribbean States
	Promoting and offering support for activities planned or initiated by IPBES	1) Supporting the strengthening and expansion of the IPBES fellowship programme; 2) Promoting academic exchange between members of IPBES subsidiary bodies, expert groups, task forces, secretariat and technical support units and WII faculty; and 3) Offering onsite capacity building and customised training programmes for a multitude of stakeholders in the arena of Biodiversity Conservation.	Ongoing	Wildlife Institute of India (WII)	In-kind contribution	Asia Pacific States
		1) Contribution to the Africa technical support unit 2) Support to regional seminars organised by values, Americas and Africa technical support units	2017-2018	Stockholm Resilience Centre, SwedBio	Combinations	Global
Strategy 1: Learning & engagement	Strengthen science-policy-society interface on biodiversity and ecosystem services	BSPIN, the Biodiversity Science-Policy Interfaces Network for Early Career Scientists (ECS): Activities promoting 1) interaction between young scientists and with other stakeholders in science-policy interface (SPI) processes, 2) capacities of ECS to engage in global biodiversity-related SPIs, 3) inter- and transdisciplinary research, 4) communicate the potential of ECS regarding IPBES (and related SPIs), and 5) encourage practical involvement of ECS in these SPIs.	Ongoing	Group of ECS, with support from NeFo	In-kind contribution	Global
	Support increased engagement and knowledge about IPBES and its deliverables through offering complemen	GIZ ValuES project[19]: regional workshops with IPBES content in South America (2016) and South-East Asia (2017); and francophone West Africa (2018)	2016-2017	GIZ ValuES, WABES, GIZ bilateral projects	In-kind contribution	Global
		ValuES training related to IPBES products (e.g. IPBES guide on multiple values) in 20 countries	Ongoing-2018	GIZ ValuES, WABES, GIZ bilateral projects	In-kind contribution	Global
		HIGRADE: Graduate school of the Helmholtz Centre for Environmental Research: Education of graduate	Ongoing	UFZ	Alignment	Western European

[19] The ValuES project is implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) in close collaboration with the Helmholtz Centre for Environmental Research (UFZ) and the Conservation Strategy Fund (CSF), on behalf of the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) as part of the International Climate Initiative (ICI).

Strategy	*Initiative*	*Activity*	*Time*	*Lead organisation and partner(s)*	*Type of contribution*	*Region*
	tary activities	students on science-policy interfaces and on IPBES				and other States
		Delivery of undergraduate and postgraduate biodiversity related courses and training	Ongoing	Department of Life Sciences, UWI with partners (University of Suriname, University of Belize, University of the West Indies, Mona Campus)	Alignment	Latin American and Caribbean States
		Adaptive Ecosystems Management for Improvements of Ecosystems Functions and Sustainable Utilization of Ecosystems Services in Ethiopia: 1) To develop local capacity in Ecosystems service assessment and valuation; and 2) To develop models for ecosystems service evaluation and elucidate the benefits that can be sustainably harnessed from enhanced ecosystems services. The project will contribute towards green growth strategy of Ethiopia	Ongoing	Addis Ababa University and partners	In-kind contribution	African States
		1) Offer GBIF guidance and training materials as standard resources for IPBES capacity building needs; 2) Making training and mentoring activities available for wider application based on IPBES requirements	Ongoing	GBIF Secretariat, GBIF participant nodes, regional nodes groupings and partners	In-kind contribution	Global
Strategy 2: Facilitating access to expertise & information	Promoting and offering support for activities planned or initiated by IPBES	Initiative to provide access to expertise and "Data and Knowledge exchange", strengthen the linkage between ESP's working groups and IPBES, and make ESP's network of National Networks and Regional Chapters more structurally linked to IPBES	Ongoing	Ecosystem Services Partnership (ESP)	Alignment	Global
		Network of indigenous and local knowledge (ILK) Centres of Distinction: Mechanism for delivering inputs into IPBES by indigenous and local knowledge holders themselves. The network is open-ended and will operate in a transparent manner to facilitate the participation and contribution of diverse knowledge views and evidence from all regions	Ongoing	Forest Peoples Programme (FPP)/African Biodiversity Network (ABN)	In-kind contribution	Global
	Support effective use of indigenous and local knowledge in assessments and other relevant deliverables and dialogue	Support to a group of indigenous peoples and local communities with experiences from negotiations in the CBD to participate in the IPBES plenary meetings 1,2,3,4 and 5	2013-2017	Stockholm Resilience Centre, SwedBio and partners (Tebtebba Foundation and Forest Peoples Programme)	In-kind contribution	Global
		1) Contribute methodologies of Regional Centres of Expertise on Education for Sustainable development (Global RCE Network) of indigenous and local knowledge into IPBES work programme and assessments; 2) Create case study reports to contribute to IPBES case study	Ongoing	UNU-IAS		Global

Strategy	*Initiative*	*Activity*	*Time*	*Lead organisation and partner(s)*	*Type of contribution*	*Region*
	among different knowledge systems	database; 3) Contribute to the review of existing global, regional and assessments as and when available; and 4) Engagement with the International Partnership for the Satoyama Initiative for developing biodiversity and ecosystem services knowledge products through a bottom up approach				
		Strengthening indigenous peoples and local communities' own initiatives and efforts to contribute their knowledge, and develop methods for how to do it, such as the Community Based Monitoring and Information Systems (CBMIS)	Ongoing	Stockholm Resilience Centre, SwedBio	In-kind contribution	Global
		Supporting activities that mobilize indigenous and local knowledge and help bringing it into IPBES process, and initiatives facilitating dialogue and understanding across knowledge systems	Ongoing	IUCN	In-kind contribution	Global
	Support increased access to data, information and knowledge through developing the necessary capacities	Biodiversity Information for Development project: Training materials for application of open-access data to meet priority needs for policy and research. Curriculum development and workshop scheduled for April 2018	Ongoing	GBIF, SANBI and partner (EU DEVCO)	In-kind contribution	Global
		Training to strengthen the mobilisation of biodiversity data, foster regional engagement and enhance capacity in biodiversity information management; Support to the Joint BIMF-EBIP Forum to strengthen networks and expertise in data and information; Training to enhance capacity in the area of georeferencing of biodiversity data; and regional training courses in "Data and Management and Use" through the project Human Capital Development in Biodiversity Informatics (BDI)	Ongoing	SANBI and partners (GBIF, IRS Biodiversity Foundation, University of Kansas and the University of Ghana)	In-kind contribution	African States
		Explore opportunities for facilitating and promoting the use of policy support tools and methodologies through more effective implementation of the IPBES catalogue	Ongoing	IPBES capacity-building task force working together with the technical support unit on policy support tools and methodologies.	In-kind contribution	Global
		Contribute to increase access to data and information relevant to IPBES deliverables	Ongoing	Inter-American Institute for Global Change Research (IAI)	In-kind contribution	Global
		Produce scientific evidence on the importance of integrated approaches of molecular systematic, biodiversity information, indigenous and local knowledge and functional adaptation of plants to mitigate climate change	Ongoing	Addis Ababa University and partners	In-kind contribution	African States
		Nansen Programme: Strengthening the knowledge base and implementing an ecosystem approach to marine fisheries in developing countries. (GCP/INT/003/NOR)	Ongoing	Norwegian Institute of Marine Research and partners (NORAD and FAO)	In-kind contribution	African States

Strategy	*Initiative*	*Activity*	*Time*	*Lead organisation and partner(s)*	*Type of contribution*	*Region*
		Case study analysis on different themes to data and knowledge and the policy support tools database and conduct ecosystem assessments within the Regional Centres of Expertise (RCEs) and see how they can link to national processes including indigenous and local knowledge	Ongoing	UNU-IAS	In-kind contribution	Global
		Contribution to the mobilisation of and access to biodiversity and conservation data, information, and knowledge against agreed IUCN Standards for, e.g. the Red List of Threatened Species, Key Biodiversity Areas, and Protected Planet	Ongoing	IUCN	In-kind contribution	Global
		Project: Capacity building for biodiversity conservation among Community Based Organizations projects funded under the Tropical Forest Conservation Fund's Small Grants Program in Guatemala. The objective of the project is to build capacities among community based indigenous organizations stakeholders, on gathering, use and management of data and information on biodiversity conservation indicators; and the practices that made possible their achievement	Ongoing	Fundación para la Conservación de los Recursos Naturales y Ambiente en Guatemala (FCG)	In-kind contribution	Latin American and Caribbean States
		Two projects: 1) Research on biodiversity and ecosystem assessment and conservation relevant to Trinidad and Tobago and the region, and 2) Knowledge sharing: the extensive zoological collection will be digitized and made available to the public via a searchable online database	Ongoing	Department of Life Sciences The University of the West Indies, with partner GBIF	In-kind contribution	Latin American and Caribbean States
Strategy 2: Facilitating access to expertise & information	Support increased engagement and knowledge about IPBES and its deliverables through offering complementary activities	Biodiversity Conservation and Protected Area Management in ASEAN (BCAMP): 1) Strengthen capacity of ASEAN Centre for Biodiversity to support the ASEAN regional agenda and ASEAN Member States in biodiversity conservation and protected area management and 2) Develop and mobilize knowledge and scientific basis for biodiversity conservation, especially in existing and new ASEAN Heritage Parks	2017-2022	ASEAN Centre for Biodiversity (ACB)	In-kind contribution	Asia Pacific States
		Initiative to improve protected area decision-making, through promoting multi-stakeholder engagement, networking with IPBES, and availing biodiversity, livelihood and decision-making data and information	Ongoing	CERMES, the University of the West Indies, and partners (incl. IUCN)	In-kind contribution	Latin American and Caribbean States
		Capacity-building dialogue with Eastern European stakeholders, Budapest in April 2016	2016	IPBES capacity-building task force, with support from the Hungarian Academy of Sciences and Corvinus University	IPBES trust fund & in-kind contribution	Eastern European States

Strategy	*Initiative*	*Activity*	*Time*	*Lead organisation and partner(s)*	*Type of contribution*	*Region*
Strategy 3: Strengthening national & regional capacities	Strengthen science-policy interface on biodiversity and ecosystem services	Strengthen science-policy interface on biodiversity (research) for Germany to: 1) Provide scientific support for national activities related to IPBES; 2) Mobilise the German biodiversity research community; and 3) Communicate and provide multiplication-effects around the theme of biodiversity, with emphasis on IPBES (Com, CB)	2009-2018	NeFo and UFZ	Alignment	Western European and other States
	Task group 4: guidance science-policy platforms and assessments	Developing guidance to support countries and (sub-) regions in establishing their own science-policy platforms and networks, and/or in carrying out national and sub-regional assessments	2017	Task group 4: IPBES secretariat, capacity-building task force and partners: UNEP-WCMC, NeFo/WABES/UFZ, ValuES/GIZ, GBIF, BES-Net/UNDP, and IUCN	IPBES trust fund & in-kind contribution	Global
	Support the development of national and regional platforms and networks	PESC-4 meeting: Meeting to strengthen stakeholder engagement in IPBES and support for establishing national platforms in the Europe and Central Asia region, including exchange with other platforms	2017	FRB, NeFo, MEA-ÖK and IPBES, with financial partial support from Swiss Biodiversity Forum, and Belgian Biodiversity Platform	In-kind contribution	Western European and other States, Eastern European States, Asia Pacific States
		Europe and Central Asia - Network (network of organisations engaged in IPBES): Overarching goal to support the national platforms, and provide a common space for sharing knowledge, resources, opinions and lessons learnt regarding IPBES	Ongoing	NeFo and Belgian Biodiversity Platform, with additional national platforms	In-kind contribution	Western European and other States, Eastern European States, Asia Pacific States
		1) Development of networks and communities of practice: sharing information on existing communities of practice so that IPBES can learn from the experience, and also build on what already exists; and 2) Support the development of an approach for carrying out national capacity self-assessment	Ongoing	Inter-American Institute for Global Change Research (IAI)	In-kind contribution	Latin American and Caribbean States
		Offer to provide technical expertise to develop national level BES assessments and to perform national level self-assessments in accordance to IPBES framework	Ongoing	Wildlife Institute of India (WII)	In-kind contribution	Asia Pacific States
		Continued development of GBIF national node network and regional collaboration, exploration of how best to integrate with national and regional platforms to support IPBES activities	Ongoing	GBIF Secretariat, GBIF participant nodes, and regional nodes groupings	In-kind contribution	Global
		IUCN offers to support the location of necessary technical experience, and opportunities to learn from the experience of others; activities that facilitate the uptake of IPBES findings in national and international policy;	Ongoing	IUCN	In-kind contribution	Global

Strategy	*Initiative*	*Activity*	*Time*	*Lead organisation and partner(s)*	*Type of contribution*	*Region*
		and the work of transforming knowledge into a local context				
		Both BES-Net and UNEP-WCMC are working to support development of national stakeholder engagement through BES-Net multi-stakeholder dialogues, and through the support provided to national ecosystem assessments (described elsewhere). Amongst other things these networks are being exposed to IPBES deliverables	Ongoing	UNDP BES-Net and UNEP-WCMC, as part of a joint project funded by the German IKI	In-kind contribution	Global
	Support for national ecosystem assessments	UNEP-WCMC is working with organizations in four countries in three regions to carry out national ecosystem assessments which support national objectives. As part of the project national capacity is being developed, and experience shared. Negotiations are under way to extend this to a further four countries.	Ongoing	UNEP-WCMC, and currently national partners in Cameroon, Colombia, Ethiopia and Viet Nam. There are additional technical partners, and UNEP-WCMC is working with support from UNDP and German IKI	In-kind contribution	Global
		1) Supporting the Biodiversity Planning Forum, Mapping Biodiversity Priorities, and 2) Strengthening the species and ecosystem assessment capabilities in selected countries	Ongoing	SANBI and partners (SCBD, UNEP-WCMC and IUCN)	In-kind contribution	African States
		ESP has a strong network of experts worldwide and offers to mobilise members to contribute to IPBES national ecosystem assessments	Ongoing	ESP	In-kind contribution	Global
		IUCN supports the location of technical experience, and opportunities to learn from the experience of others, training and networking support specifically tailored to the needs of assessments and promotion and use of IPBES guides and catalogues in planning and carrying out assessments	Ongoing	IUCN	In-kind contribution	Global
Strategy 3: Strengthening national & regional capacities	Support national capacity self-assessment	IUCN has a strong national footprint, and offers to mobilise member organisations/scientists in supporting/promoting: 1) the development of an approach for carrying out national capacity self-assessment; 2) countries in carrying out their national capacity self-assessment; and 3) the mobilisation of relevant individuals/experts in carrying out the assessment	Ongoing	IUCN	In-kind contribution	Global
		Open offer to use of GBIF capacity self-assessment tool and adaptation/integration with wider IPBES self-assessment needs	Ongoing	GBIF Secretariat, GBIF participant nodes, regional nodes groupings and partners	In-kind contribution	Global
		University initiatives including 1) Training and support the IPBES fellowship programme; 2) Facilitating National Capacity Self-assessment; and 3) Promoting National and sub-regional Ecosystem Assessments	Ongoing	University of Trinidad and Tobago	In-kind contribution	Latin American and Caribbean States

Strategy	*Initiative*	*Activity*	*Time*	*Lead organisation and partner(s)*	*Type of contribution*	*Region*
Strategy 1 & Strategy 3	Promoting and offering support for activities planned or initiated by IPBES	Support the strategies through: 1. Nomination of experts for different assessments; 2. Support to increase uptake of IPBES assessments and products; 3. Integration of IPBES work into RCI action plan and contribution to its work programmes and various task forces; and 4. Linking with multiple stakeholders in sub-regions across different continents and with existing networks such as the Biodiversity and Community Health Initiative, UNEP ABS GEF project etc.	Ongoing	UNU-IAS	In-kind contribution	Global
		WABES: Initiative supporting the West African (WA)contribution to IPBES, including the following components: 1) Masters programme for students from 15 WA countries, implemented in Côte d'Ivoire (workshops and online); 2) Training to increase knowledge and methodological know-how about IPBES and its work programme and deliverables; 3) Online community of practice around Biodiversity and Ecosystem Services in WA formed via workshops and other activities; and 4) Awareness raising related to IPBES biodiversity and ecosystem services among governments and stakeholders, supporting establishment of communities of practice and national platforms in the WA region. WABES regional workshop, Abidjan, Côte d'Ivoire 28-30 November 2017	2017-2022	/FU	In-kind contribution	African States
Strategy 1 & Strategy 3	Support increased engagement and knowledge about IPBES and its deliverables through offering complementary activities	Project: IPBES capacity-building. Main goal of the project is to enhance the capacity of governments, scientists and organizations in the target regions South-East-Europe, Eastern Europe and Central-Asia to meaningfully participate in IPBES processes. IPBES capacity building workshop held in South-East Europe, Sarajevo, Bosnia-Herzegovina on 16-17 October 2017	Ongoing	Institute for Biodiversity - Network e.V. (ibn).	In-kind contribution	Eastern European States, Asia Pacific States
	Task group 1: Guidance - capacity-building rolling plan	Develop guidance regarding processes and mechanisms that support the implementation of the capacity-building rolling plan	Ongoing	Task group 1: IPBES secretariat, capacity-building task force and partners (SCBD, ValuES/GIZ, NeFo/WABES/UFZ), IUCN and UNU-IAS)	IPBES trust fund & in-kind contribution	Global
All three strategies	Task group 2: Web portal	Develop a capacity-building web portal supporting the implementation of the capacity-building plan	Ongoing	Task group 2: IPBES secretariat, capacity-	IPBES trust fund & in-	Global

Strategy	*Initiative*	*Activity*	*Time*	*Lead organisation and partner(s)*	*Type of contribution*	*Region*
				building task force and UNEP-WCMC	kind contribution	
	Task group 3: Use and uptake	Strategic engagement with policy makers on use and uptake of regional assessments	Ongoing	Task group 3; IPBES secretariat, capacity-building task force and partners (UNEP-WCMC, BES-Net/UNDP, WII, GIZ ValuES, NeFo/WABES/UFZ), and IBN)	IPBES Trust fund & in-kind contribution	Global
	Supporting use & uptake of the IPBES assessments and products	Regional workshop on agrobiodiversity focused on mainstreaming biodiversity in agriculture for sustainable development and food security, Chiang Mai, Thailand in September 2017	2017	ACB, partnership with SEARCA (Southeast Asia Regional Centre for Agriculture) on Agrobiodiversity	In-kind contribution	Asia Pacific States
		The BES-Net "Trialogues" are multi-stakeholder dialogues focusing on specific policy questions at the national and regional levels. By facilitating fruitful discussions among the three BES-Net communities of policy, science and practice, the Trialogues contribute to addressing specific policy issues to help unlock shifts in the development trajectory of societies towards sustainability. The Trialogues bridge the divide between the science, policy and practice communities through intercultural dialogue, create a shared space for the joint assessment of regionally-relevant knowledge and the co-creation of locally appropriate policy options; and build a common agenda for action. The Trialogues are supported by online networking and collaboration tools hosted on the BES-Net web-portal. 1st Regional Trialogue held: BES-Net Trialogue on Pollinators, Food Security and Rural Development, 18-20 Oct. 2017 Sarajevo, Bosnia and Herzegovina. BES-Net also supports experience sharing between the countries engaged in undertaking their national assessments	Ongoing	UNDP BES-Net Network and its 85 Partners	In-kind contribution	Global
		Uptake of IPBES products on national level in the existing ValuES Community of Practice	Ongoing	GIZ ValuES and partner UNU, GIZ bilateral projects	In-kind contribution	Global
		ESP Regional Conferences in 2018, MENA-region (Jordan), Asia (India, with WII), Europe (Spain) and Latin America (Brazil). Opportunities to strengthen IPBES activities in these regions	2018	ESP	In-kind contribution	Global
	Task group 5: IPBES learning materials	Identify existing and potential sources of learning materials, facilitate their use and support their development	Ongoing	Task group 5 IPBES secretariat, CBTF and partners: WABES/ZEF, NeFo/UFZ, ValuES/GIZ, IUCN, UNU-IAS, BES-Net/UNDP, and IBN	IPBES trust fund & in-kind contribution	Global

Strategy	*Initiative*	*Activity*	*Time*	*Lead organisation and partner(s)*	*Type of contribution*	*Region*
	Arena for dialogue with contributing organisations	5th meeting of the IPBES task force on capacity-building	2017	IPBES capacity-building task force and partners, with contribution from the Norwegian Environment Agency	IPBES trust fund & in-kind contribution	Global
		1st meeting of the IPBES capacity-building Forum	2015	IPBES capacity-building task force, with contribution from WII	IPBES trust fund & in-kind contribution	Global
		2nd meeting of the IPBES capacity-building Forum	2016	IPBES capacity-building task force and partners, with contribution from UNDP and UNEP	IPBES Trust fund & in-kind contribution	Global
	Promoting and offering support for activities planned or initiated by IPBES	BES-Net web-portal and online communication and platform: BES-Net shares IPBES calls for action, IPBES information and IPBES products through its website, newsletter and newsletter outlets. BES-Net provides technical support and offers access to online networking and collaboration tools and to the wider BES-Net community	Ongoing	UNDP/BES-Net Network and its 85 Partners	In-kind contribution	Online
		Promoting opportunities and providing technical support and resources to IPBES capacity-activities. Sharing of information on existing communities of practice so that IPBES can learn from the experience, and also build on what already exists	Ongoing	IUCN	In-kind contribution	Global
	Support increased engagement and knowledge about IPBES and its deliverables through offering complementary activities	Short-term Action Plan (2017-2020) to Enhance and Support Capacity-Building for the Implementation of the Convention and its Protocols: Synergy and potential joint actions between the IPBES Capacity-building Rolling Plan and the Short-term Action Plan (2017-2020) to Enhance and Support Capacity-Building for the Implementation of the Convention and its Protocols as well as the BBI Action Plan 2017-2020	2017-2020	SCBD, and various partners	Alignment	Global
		Actions to strengthen collaboration between the CBD and IPBES on capacity-building, through the Bio-Bridge Initiative, including 1) Using various tools, mechanisms and services, including the helpdesk service, an interactive web platform, regional roundtables and a small seed funding support. 2) Making use of the BBI web platform to inform/support existing IPBES communities of practice and networks on different topics, and 3) Making use of BBI help desk	Ongoing	SCBD	Alignment	Global
		Capacity Building Project for the IPBES Asia-Pacific Regional Assessment, it includes 1) Integration of ILK into the regional assessment, 2) Application of outcome of the thematic assessment for scenario analysis and	Ongoing	Institute for Global Environmental Strategies (IGES) and the Asia-Pacific Network for Global Change Research (APN)	In-kind contribution	Asia-Pacific

Strategy	*Initiative*	*Activity*	*Time*	*Lead organisation and partner(s)*	*Type of contribution*	*Region*
		models. 3) Policy support for policy makers and stakeholders to utilise the assessment outcomes, including organisation of a series of science-policy dialogue workshops at sub-regional level in 2018				
		GIZ ValuES project to provide technical and financial support to TSU on Values. Joint activities Developed and carried out under the Values TSU (e.g. workshops regarding the uptake of the guide on multiple values in IPBES regional (2016) and global assessments (2017); workshop on IPBES socio-ecological indicators (2017))	Ongoing-2018	GIZ ValuES and the IPBES expert group on values	Combination	Global
		Horizon scanning on ecosystem services (facilitating a future ecosystem assessment). An exercise to identify the most important research questions in order to further support the developments towards a potential national ecosystem assessment of Germany (NEA-DE)	Starting summer 2017	UFZ and partner (iDiv)	Alignment	Western European and other States

UNITED NATIONS

UNEP

Food and Agriculture Organization of the United Nations

UNDP

BES

IPBES/6/INF/13

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Item 5 of the provisional agenda*

Report of the Executive Secretary on the implementation of the first work programme for the period 2014–2018

Information on work related to indigenous and local knowledge (deliverable 1 (c))

Note by the secretariat

1. In section III of decision IPBES-5/1, the Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) approved the approach to recognizing and working with indigenous and local knowledge set out in annex II to the decision, and requested the Multidisciplinary Expert Panel, supported by the task force on indigenous and local knowledge, to implement the approach. Since the adoption of decision IPBES-5/1, work on indigenous and local knowledge has focused on the implementation of the indigenous and local knowledge approach.

2. The annex to the present note, which is presented without formal editing, sets out information on progress to date in the work related to indigenous and local knowledge, including the implementation of the indigenous and local knowledge approach in the context of the IPBES global assessment of biodiversity and ecosystem services, progress in the development of methodological guidance for the approach and arrangements supporting the implementation of the approach.

* IPBES/6/1.

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Annex

Information on work related to indigenous and local knowledge

I. Context

1. With decision IPBES-5/1 the Plenary:

(a) *Approved* the approach to recognizing and working with indigenous and local knowledge (set out in annex II to decision IPBES-5/1) and *requested* the Multidisciplinary Expert Panel, supported by the task force on indigenous and local knowledge, to implement it;

(b) *Invited* indigenous peoples and local communities and their representatives, as well as experts on indigenous and local knowledge, to engage in the activities described in the approach, in particular through the participatory mechanism;

(c) *Invited* Governments, stakeholders, strategic partners and others to support activities that mobilize indigenous and local knowledge where such knowledge is needed but not available in readily available formats and that increase the capacity of indigenous peoples and local communities to engage in and benefit from the Platform; and

(d) *Requested* the Executive Secretary to make the arrangements necessary to implement the approach, including arrangements for the establishment of the participatory mechanism, subject to the availability of resources.

2. Following up on this decision, the work on indigenous and local knowledge has focused on the implementation of the indigenous and local knowledge approach.

3. At the 9th meeting of the MEP and Bureau (June 2017), progress made on the implementation of the indigenous and local knowledge approach was reported, reflecting on the discussions and outcomes from the 6th meeting of the indigenous and local knowledge task force, held in May 2017 in Pereira, Colombia. The Bureau and MEP invited the task force to submit at their 10th meeting a draft methodological guidance for the implementation of the approach as well as a further developed proposal for the governance supporting the implementation of the approach.

4. At the 10th meeting of the MEP and Bureau (October 2017), further progress was reported. This included implementing the following aspects of the approach, described in more detail in the following sections: a) Implementation of the indigenous and local knowledge approach in the context of the Global Assessment; b) Development of methodological guidance for the indigenous and local knowledge approach; and c) Arrangements supporting the implementation of the indigenous and local knowledge approach. The Bureau and MEP noted some overlap between the proposed "facilitation, management and support" group and the task force; and that the functions of both should be clearly delineated; and noted progress made in the development of a proposal for institutional arrangements supporting the implementation of the indigenous and local knowledge approach.

II. Implementation of the agreed approach to recognising and working with indigenous and local knowledge in IPBES

A. Implementation of the Indigenous and Local Knowledge approach in the context of the Global Assessment

5. After the approval of the IPBES approach to working with indigenous and local knowledge (section III of decision IPBES-5/1, and annex II to the decision), the Global Assessment devised steps to implement the indigenous and local knowledge approach, which were presented at the ninth meeting of the MEP and Bureau (June 2017). These concrete plans included a series of consultations that would take place either online or face-to-face with varying objectives.

6. The indigenous and local knowledge liaison group within the Global Assessment, through one of its members Zsolt Molnár (Coordinating Lead Author Chapter 2 of the Global Assessment), organized a meeting of the Global Assessment indigenous and local knowledge liaison group (Budapest, Hungary 31 March to 02 April 2017). The objectives of this meeting were to discuss the process for the inclusion of indigenous and local knowledge into the Global Assessment, in addition to the planning and preparation of the upcoming consultations.

7. Subsequently, Eduardo Brondizio, co-chair of the Global Assessment, together with the indigenous and local knowledge liaison group and advised by the IPBES indigenous and local knowledge task force, launched the **Indigenous and Local Knowledge Call for Contributions** from 25 July to 15 September 2017 in three languages (English, French and Spanish). There were 220 submissions received in response to that first call (English: 174, French: 14, and Spanish 32), which was extended until 20 December 2017.

8. Contributions received through the **Indigenous and Local Knowledge Call for Contributions** mostly consist of research and conference papers (case study/conceptual/review), books and book chapters. Other submissions include synthesis reports, PhD dissertations, websites, videos, and newspaper articles. A large number of names of experts and organizations were also submitted.

9. A series of face-to-face indigenous and local knowledge consultations have also been held:

(a) Side Event at the 16th session of the United Nations Permanent Forum on Indigenous Issues (New York, USA, 24 April – 03 May 2017): **Operationalization strategy for advancing Indigenous and Local Knowledge and Practices (Indigenous and Local Knowledge) in the IPBES Global Assessment**.

(b) Session at the 40th Annual Conference of the Society of Ethnobiology (Montreal, Canada, 10 – 13 May 2017): **The IPBES Global Assessment of Biodiversity and Ecosystems Services: Calling upon the contribution of Ethnobiology**. Both were reported on during the last (9th) meeting of the MEP and Bureau;

(c) **Dialogue on Human Rights and Biodiversity Conservation** (Eldoret, Kenya, 20 – 23 November 2017). The co-organizers of this workshop were SwedBio at Stockholm Resilience Centre, Forest Peoples Programme, and Natural Justice, with local hosts Chepkitale Indigenous Peoples Development Project. This was an opportunity to consult on issues related to Chapters 2, 3, 5, and 6 involving the links between IPLCs and protected areas (PAs), protected area governance, and human rights. Participating IPBES authors gave presentations, engaged in dialogue discussions and carried out individual interviews with key indigenous participants. A report with the IPBES meeting outcomes has been made available to IPBES authors;

(d) **A dialogue held in the context of the 10th meeting of the Ad Hoc Open-ended Working Group on Article 8(j) and Related Provisions of the Convention on Biological Diversity (CBD)** (Montreal, Canada, 09 December 2017). The IPBES secretariat worked with the CBD, International Indigenous Forum on Biodiversity (IIFB), Indigenous Women's Biodiversity Network (IWBN), International Indigenous Forum on Biodiversity and Ecosystem Services (IIFBES), and the Forest Peoples Programme (FPP) on co-organizing this full-day dialogue, which focused on key issues for indigenous and local communities in the Global Assessment. A report of the meeting outcomes has been made available to IPBES authors.

B. Progress regarding the development of methodological guidance for the IPBES indigenous and local knowledge approach

10. The 6th meeting of the indigenous and local knowledge task force (8 – 11 May 2017, Colombia), discussed the IPBES indigenous and local knowledge approach, focusing on next steps for its operationalization. It was agreed that further methodological guidance was needed to operationalize the requirements for respectfully working with indigenous knowledge and indigenous knowledge holders, including on how to work with FPIC principles.

11. Concerns included how to take into account indigenous and local knowledge holder values within the approach, and how to account for these using FPIC principles. Participants also highlighted that a concerted effort would be needed to educate indigenous participants about their rights, about the IPBES assessment process, and about how data will be stored and synthesized, in order for indigenous and local knowledge holders to be "informed" before giving their consent. Definitions of indigenous peoples were also discussed.

12. In line with this guidance, the TSU on indigenous and local knowledge subsequently further analysed the indigenous and local knowledge approach, and the comments of the task force. A review of other methodological documents produced by international bodies aiming to work respectfully and effectively with indigenous peoples was also carried out by the TSU.

13. A comprehensive outline for the Methodological Guidance was subsequently drafted, discussed at the 10th meeting of the MEP (October 2017), and shared with the task force for comments, and text was developed for some of its sections (see Appendix 1). The methodological

guidance aims to address all four phases of the Assessment process, as well as to propose ways to work towards many of the aims of the other thematic areas of IPBES: knowledge and data, policy support tools and methodologies, and capacity-building.

C. Arrangements supporting the implementation of the indigenous and local knowledge approach

14. The participatory mechanism on indigenous and local knowledge is one of the main mechanisms supporting the implementation of the indigenous and local knowledge approach. The Bureau and the MEP, at their 10th meetings (October 2017) considered an initial governance structure, reproduced in appendix II, to implement the approach and a set of steps to establish it. This governance will be further developed and considered by MEP and Bureau in 2018, and could form part of the consultations on possible institutional arrangements for the second work programme, and would be presented, in this context, to the Plenary.

15. The proposed initial governance structure of the participatory mechanism consists of a "Facilitation, Management and Support" Group, hereafter called "the Group", including 24 members as follows:

(a) Seven IPLC representatives drawn from the seven IPLC regions: under the UN Permanent Forum on Indigenous Issues, the seven socio-cultural regional groupings of IPLCs are: Africa; Asia; Central and South America and the Caribbean; The Arctic; Eastern Europe, Russian Federation, Central Asia and Transcaucasia; North America; The Pacific;

(b) Five strategic partners, representing a larger set of organizations with direct involvement with IPLCs and others with IPLC interests. These five partners would be represented by their respective resource person on the Group;

(c) Eight indigenous and local knowledge experts representing relevant expert groups and task forces within IPBES; and

(d) Two members of the Bureau and two members of the MEP acting as co-chairs. Technical support to the Group would be provided by the secretariat, through its TSU on indigenous and local knowledge.

16. To establish this "Facilitation, Management and Support" Group, the following process could be followed:

(a) The Chair of IPBES would invite the seven IPLC regions to name one representative each, to serve for a term of three years, renewable once;

(b) An open call for expressions of interest for strategic partner organizations would be launched and five organizations would be selected by MEP and Bureau to be represented on the Group for a possible term of three years, renewable once; and

(c) A set of eight indigenous and local knowledge experts would be selected by MEP and Bureau from ongoing assessments (from the Global Assessment and any assessments launched subsequently), task forces and possibly from other expert groups.

17. Once established, this Group would support the implementation of the indigenous and local knowledge approach, providing strategic advice, supporting the work with strategic activities by the IPLCs and selected strategic partners, and coordinating the strategic outreach to further catalyze broader levels of engagements, mainly through open calls for contributions to targeted activities.

18. The consultations planned for 2018 on a second work programme may address whether adjustments are necessary to the focus and scope of the task forces established for the first work programme, including the task force on indigenous and local knowledge (see document IPBES/6/11 on the development of a second work programme). The proposal for a "Facilitation, Management and Support" Group of the participatory mechanism could be considered in this context and, following further consideration by the MEP and Bureau, be submitted for consideration by the Plenary, in the context of institutional arrangements for the implementation of the second work programme.

Appendix I

Outline of the methodological guidance for the IPBES indigenous and local knowledge approach

A. Introduction

1. Background to additional methodological guidance

Background to additional methodological guidance needed on how to engage with indigenous peoples and indigenous knowledge

2. Key areas of focus

Brief introduction to key areas of focus, as specified in Decision IPBES-5/1:

(a) Online surveys and web-based consultations

(b) Face-to-face consultations with representative networks and organizations

(c) Specific and localized forms of consultations with ILK holders

(d) Synthesis and analysis of ILK knowledge, information and data

(e) Outreach and information sharing

B. Free prior and informed consent (FPIC) and best practice

1. Background to FPIC

Definitions for free, prior, informed and consent, and brief history

2. Elements of effective consultations with ILK Holders

(a) ILK holder rights within the process

(b) Considerations of time, effort, and budget

C. IPBES approach and free prior and informed consent (FPIC)

1. What ILK holders need to know for 'informed' consent

Discussion of all of the aspects of IPBES that ILK holders should understand before 'informed' consent can be given, including aims, methods, and ILK holder rights

D. Methodological guidance for the IPBES assessments' four phases

1. Phase 1: Scoping

(a) How to reach out to IPLC networks

(b) Selection and facilitation of indigenous participants

(c) How to engage effectively with indigenous peoples during face-to-face dialogues

(d) Improving the chances of successful online review

(e) Developing indicators that reflect ILK holder concerns

2. Phase 2: Synthesizing

Methods and key considerations for

(a) Developing a set of practices to help manage ILK evidence and data that will be collected in the assessments

(b) Working with existing written documents or data containing ILK, including data and cases from other IPBES assessments and related reports and meta-analysis and data from international research centres and institutions and relevant regional centres;

(c) Working with indigenous and local knowledge manifested in forms such as ritual, ceremonial, oral, dance, song and visual manifestations, including symbols, documentaries and artwork

(d) Local dialogue workshops with ILK holders which aim to gather knowledge directly

(e) Longer-term capacity building with ILK holders to support regular community level monitoring and self-assessment schemes that address issues relevant to IPBES

3. Phase 3: Reviewing

Key methodological considerations for facilitating ILK holder participation in document reviews through web-based interactions and face-to-face dialogue meetings

4. Phase 4: Knowledge sharing

Methodological considerations on how to share information with ILK holders and raise awareness of IPBES products and reports

E. Knowledge and data

Noting that the above methodological guidance will work towards the main aims of knowledge and data in relation to ILK:

1. **How to identify ILK experts and manage evidence and data:** Identify, in coordination with indigenous and local knowledge holders, indigenous and local knowledge experts and experts on indigenous and local knowledge; a set of practices to help manage evidence and data that will be collected in the assessments;

2. **Access to and management of available sources of ILK:** Facilitate, as appropriate, via the IPBES web-based infrastructure, the access to and management of available sources of indigenous and local knowledge, both for internal use in developing assessments and for decision makers and scholars drawing on the work of IPBES to support their own work, in line with relevant standards and conventions;

3. **Mobilization of ILK collection:** Promote and catalyse the mobilization of indigenous and local knowledge, as appropriate, where such knowledge does not exist in readily available formats in ways that reflect the concepts of parallel validation or co-production processes, with the support of appropriate partners, focusing on gaps that emerge during each phase of an assessment.

4. **Developing indicators, units of analysis and classifying units of analysis and natures gifts to people:** Take into account appropriately those aspects relevant to indigenous and local knowledge and indigenous peoples and local communities in the list of indicators, classifications of units of analysis and classification of nature's contributions to people including ecosystem services and nature's gifts.

F. Policy support tools and methodologies

Noting that the above described methodological guidance will work towards the goals for Policy Support Tools and Methodologies:

1. **Develop tools and methods:** Identify, describe and facilitate the use of relevant tools and methods for implementing the four phases of the proposed approach. Where such tools and methods still need to be developed, IPBES will promote and catalyse their development with appropriate partners;

2. **Policy responses, decision-making processes:** Ensure that policy responses, decision-making instruments and processes relevant to indigenous and local knowledge and indigenous peoples and local communities are reflected in IPBES assessments.

G. Capacity-building

Noting that the above described methodological guidance will work towards the IPBES goals for capacity-building:

1. **Identify, prioritize and build capacity:** Identify, prioritize and build capacity critical to its implementation, within the means available, through, for example, training workshops and webinars on the approaches to and procedures for recognizing and working with indigenous and local knowledge in assessments or participation in the fellowship programme; and

2. **Promote and catalyse capacity building activities:** Promote and catalyse the undertaking of capacity-building activities in support of broader capacity-building needs involving, among other mechanisms, strategic partnerships where such needs go beyond the means of IPBES. In this context, the participatory mechanism could strengthen the ability of indigenous peoples and local communities to take part in, contribute to, and benefit from IPBES deliverables.

Appendix II

Arrangements establishing the participatory mechanism

1. The following arrangements were considered by Bureau and MEP at their 10th meetings (October 2017), and will be further developed in 2018.

2. The following objectives of the participatory mechanism derive from the agreed ILK approach (decision IPBES-5/1, section III, and annex II to the decision) and include, inter alia, the following:

(a) support the IPBES work programme by linking with strategic partners to build capacity of indigenous peoples and local communities to engage in IPBES;

(b) mobilize indigenous and local knowledge in formats accessible to IPBES;

(c) ensure processes are in place for giving back to indigenous peoples and local communities through sharing knowledge and insights gained through assessments;

(d) promote dialogue with various networks, relevant experts and policymakers to allow participation in all four phases of the assessment process, including both web-based consultations and dialogue workshops;

(e) assist in development of policy support tools and methodologies which have special reference and/or significance to IPLCs;

(f) create opportunities for shared learning through dedicated discussion forums on the web-based platform and/or face-to face meeting as appropriate.

3. To facilitate, manage and support the participatory mechanism, a "Facilitation, Management and Support" Group (see Figure 1) would be established, including:

(a) seven IPLC representatives drawn from the seven IPLC regions: under the UN Permanent Forum on Indigenous Issues the seven socio-cultural regional groupings of IPLCs are: Africa; Asia; Central and South America and the Caribbean; The Arctic; Eastern Europe, Russian Federation, Central Asia and Transcaucasia; North America; The Pacific;

(b) five strategic partners represented by a resource person: organizations with direct involvement with IPLCs and others with IPLC interests; and

(c) twelve ILK experts representing relevant expert groups and task forces within IPBES, as well as representatives of the Bureau, MEP and of the secretariat (including its TSU).

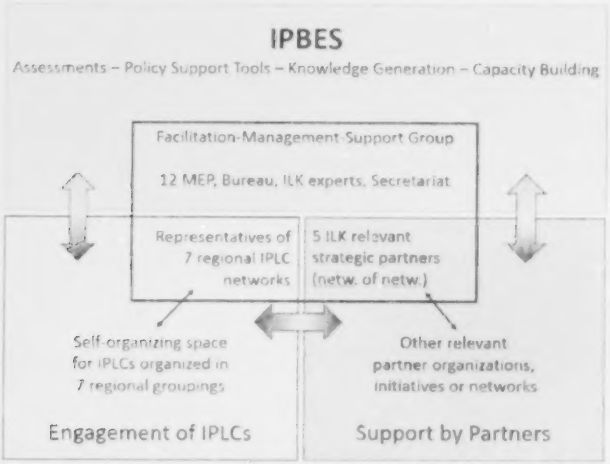
IPBES
Assessments – Policy Support Tools – Knowledge Generation – Capacity Building
Facilitation-Management-Support Group
12 MEP, Bureau, ILK experts, Secretariat
Representatives of 7 regional IPLC networks
5 ILK relevant strategic partners (netw. of netw.)
Self-organizing space for IPLCs organized in 7 regional groupings
Other relevant partner organizations, initiatives or networks
Engagement of IPLCs
Support by Partners

Figure 1. Structure of the proposed "Facilitation, Management and Support Group" governing the participatory mechanism, *the arrows indicate joint activities such as dialogue workshops, knowledge mobilization, capacity building and shared learning, in support of and/or drawing from IPBES assessments and other products (e.g. policy support tools).*

4 To establish this "Facilitation, Management and Support" Group, it is suggested that:

(a) The Chair of IPBES invite the seven IPLC regions to name seven representatives, one from each of their regions for a term of a suggested length of 3 years (renewable once);

(b) An open call for interest of expression for strategic partner organizations be launched and MEP and Bureau select five appropriate organizations as representatives of this larger set of organizations for a term of a suggested length of 3 years (renewable once); and

(c) The ILK experts be drawn from ongoing assessments (from the global assessment and possibly other subsequently launched assessments), the task forces (capacity building, ILK and knowledge and data) and possibly from other expert groups.

5 The "Facilitation, Management and Support" Group would be chaired by two members each of the MEP and Bureau. Technical support to the group would continue to be provided by the secretariat (and its TSU on ILK).

6 Once established, this group would support implementation of the ILK approach, providing strategic advice, supporting the work with strategic activities by the IPLCs and selected strategic partners, as well as coordinating the strategic outreach to further catalyze broader levels of engagements, mainly through open call to contributions to targeted activities.

7 Collaborative activities would be further defined for the four phases of any assessment cycle to implement the ILK approach, as follows:

(a) Phase 1 – Scoping:

i. Building capacity on IPBES processes and the value of getting engaged;

ii. Promoting nominations of ILK experts to IPBES call for nomination for the scoping expert group;

iii. Supporting the face-to-face dialogue meeting scoping the assessment by reaching out to IPLC networks to get input to scoping;

iv. Supporting the online review of the scoping document by amplifying its reach, including through group reviews among IPLCs and strategic partners.

(b) Phase 2 – Mobilization of data and information:

i. Building capacity on IPBES processes and the value of getting engaged;

ii. Promoting nominations of ILK experts to IPBES call for nomination for the assessment expert group;

iii. Supporting the call for contributions to gather evidence in response to the questions elaborated during the scoping phase by:

a. Mobilizing knowledge that is available to partners, organizations and networks of the participatory mechanism;

b. Where such knowledge is not available: Supporting the mobilization of knowledge from IPLCs 1) short-term by facilitating local dialogue workshops gathering knowledge, and 2) longer-term by building capacity and supporting regular community level monitoring and self-assessment schemes that address issues relevant to IPBES.

(c) Phase 3 – Engagement in reviews:

i. Facilitating group reviews of first order drafts, second order drafts, and summaries for policymakers in support of the regular web-based review phases of the assessments;

ii. Supporting face-to-face dialogue meetings aimed at in-depth reviews of specific issues of interest to the assessment by reaching out to IPLC networks to get inputs to in-depth review.

(d) Phase 4 – Sharing knowledge and insights:

i. supporting sharing knowledge and insights gained through an assessment, e.g. by developing IPLC-appropriate educational material, undertaking capacity building workshops, training trainers, organizing discussions (face to face – e-learning), etc.

8 An ILK web portal would be developed in support of the participatory mechanism.

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Item 5 of the provisional agenda*

Report of the Executive Secretary on the implementation of the first work programme for the period 2014–2018

Information on work related to knowledge and data (deliverables 1 (d) and 4 (b))

Note by the secretariat

1. In section II of its decision IPBES-2/5 on the work programme for the period 2014–2018, the Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) established a task force on knowledge and data for the period 2014–2018, whose terms of reference are set out in annex III to that decision. The primary purpose of the task force is the implementation of deliverables 1 (d) and 4 (b) of the first work programme.

2. In section II of its decision IPBES-3/1, the Plenary approved the data and information management plan for 2015 set out in annex II to the decision and requested the secretariat to submit to the Plenary, for information, data and information management plans for each ongoing assessment and to develop data and information management plans in the context of any scoping process or report. Activities to be undertaken under the data and information management plan in 2016 were set out in appendix II to the note by the secretariat on an update on the work of the task force on knowledge and data submitted to the Plenary at its fourth session (IPBES/4/INF/7). In order to implement the data and information management plan in 2016 and to more effectively fulfil its mandate, the task force on knowledge and data established three task groups – subgroups of the task force consisting of members of the task force and resource persons – on (a) indicators and data for IPBES assessments, (b) web-based infrastructure in support of data and information management needs, and (c) knowledge generation catalysis.

3. In section III of its decision IPBES-5/1, the Plenary took note of the outline workplan for the task force on knowledge and data for 2017 and 2018, set out in annex III to the decision. The Plenary also requested the task force, subject to the availability of resources, to further develop the outline workplan with clear deliverables and milestones for 2017 and 2018, taking into account the comments received during the fifth session of the Plenary, in consultation with relevant multilateral environmental agreements, international processes and organizations, to provide further updates during the intersessional periods through the Platform website and to report on progress to the Plenary at its sixth and seventh sessions. The Plenary encouraged the task force to develop terms of reference to specify the modalities of its collaboration on specific tasks with partner organizations.

4. The annex to the present note, which is presented without formal editing, sets out information on progress made by the task force on knowledge and data in its work and on activities planned for 2018.

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Annex

Information on work related to knowledge and data

I. Overview

1. After the fifth session of the Plenary, the task force on knowledge and data continued to work in the three task groups established in 2016 on (a) indicators and data for IPBES assessments, (b) web-based infrastructure in support of data and information management needs, and (c) knowledge generation catalysis. In sections II to VI below, information is set out on activities undertaken in relation to these three areas of work and activities planned to be implemented between the sixth and seventh sessions of the Plenary.

II. Guidance and support regarding the use of indicators in IPBES assessments

A. Introduction

2. According to its terms of reference, the responsibilities of the task force on knowledge and data include to advise on the indicators and metrics to be used in IPBES products and on the standards necessary for capturing and managing associated data (decision IPBES-2/5, annex III, section B, paragraph (d)).

3. The work of the task group on indicators comprises three main elements: (i) guidance on core and highlighted indicators for use in IPBES assessments, including on social-ecological bundles of indicators, (ii) collaboration with organizations that have developed the selected indicators regarding the provision of information and data related to those indicators, and (iii) the provision of tailored support to assessment authors regarding the use of indicators.

4. In decision IPBES-3/1, the IPBES Plenary approved the undertaking of four regional assessments of biodiversity and ecosystem services and of the assessment of land degradation and restoration, in accordance with the procedures for the preparation of the Platform's deliverables and as outlined in the scoping reports for the assessments set out in annexes III to VIII to that decision, for consideration by the Plenary at its sixth session. The generic scoping report for the regional assessments states, among other things, that the assessments will draw on a wide variety of data sets addressing all the specific components of the conceptual framework, and that a common framework on data standards developed by the knowledge and data task force will be applied to all assessments in order to facilitate intraregional, interregional and subregional comparisons.

5. In decision IPBES-4/1, the IPBES Plenary approved the undertaking of a global assessment of biodiversity and ecosystem services in accordance with the procedures for the preparation of the Platform's deliverables and as outlined in the scoping report for the assessment set out in annex I to that decision, for consideration by the Plenary at its seventh session. The scoping report mandated the assessment expert group to draw on data and information from diverse knowledge systems, addressing all the components of the conceptual framework in order to explore the interrelationships between nature, nature's benefits, drivers and human well-being. It also sets out that the task force on knowledge and data will provide active guidance on data and information quality, confidence, indicators, baselines and representativeness for the assessment, and that a core set of indicators with appropriate baselines will be used consistently across the global and regional/subregional assessments and will be closely aligned with existing international frameworks.

6. In response to its mandates, the task force on knowledge and data developed a list of 30 core indicators, which authors were urged to use in addition to other indicators or data sources they may choose, and 42 highlighted indicators, which authors may be interested in using, but with no expectation regarding their consistent use in the assessments. The lists were approved by the Multidisciplinary Expert Panel following its seventh meeting, held in Bonn in June 2016 and were set out in appendices III and IV to document IPBES/5/INF/5.

B. Progress achieved and next steps planned in supporting experts working on assessments regarding the use of IPBES core indicators

7. Since the fifth session of the Plenary, the task group on indicators, supported by the technical support unit on knowledge and data, developed a set of standardized visualizations for those core indicators, for which data is currently available. The visualizations were intended to support assessment authors in the communication and interpretation of status and trends of biodiversity and ecosystem services as described by indicators at the global, regional and sub-regional levels. The visualizations were meant to enable the consistent and appropriate representation of indicator information across all chapters and assessments.

8. A first draft of the visualizations for 17 out of 30 indicators was made available to assessment authors and to indicator data providers for their review in the beginning of April 2017. By September 2017, the visualizations had been revised in response to comments received by authors and data providers. Visualizations for 9 further indicators also had been prepared. Following further comments provided by authors and indicator providers, a fully revised version of visualizations for the 26 core indicators, for which data is currently available, was made available in November 2017 to the authors of the regional assessments of biodiversity and ecosystem services, the assessment of land degradation and restoration, and the global assessment of biodiversity and ecosystem services.

9. The visualizations provided for use in assessments include visualizations of the indicators at the global, regional and sub-regional level. For most indicators both area corrected and non-area corrected visualizations were provided. The visualizations show the average indicator value and, where available, temporal trends together with 5th and 95th percentiles. For temporal indicators, LOESS smoothing, a non-parametric form of local regression, was used to illustrate temporal trends in average and percentiles. For some indicators, simple line graphs without LOESS smoothing and without characterization of variance were provided.

10. The process of selecting a set of core indicators for use in IPBES assessments, liaising with indicator providers regarding access to data and preparing a set of standardized visualizations was only finalized at a late stage of the assessment process, therefore the authors of the regional assessments of biodiversity and ecosystem services and of the assessment of land degradation and restoration were not in a position to use all of the core indicators and the standardized visualizations in the assessments.

11. The task group on indicators, supported by the technical support unit, plans the following activities between the sixth and seventh sessions of the Plenary:

(a) Liaison with indicator providers regarding updates in data and resulting updates of the visualizations and communication to assessment authors;

(b) Support to the use of IPBES core indicators and standardized visualizations in the global assessment of biodiversity and ecosystem services:

(i) March-April 2018: support to assessment authors in the preparation of the second order draft of the chapters of the assessment and the first order draft of the summary for policymakers;

(ii) May-December 2018: support to assessment authors in the preparation of the final draft of the chapters of the assessment and the summary for policymakers;

(c) Support, as appropriate, to the use of IPBES core indicators and standardized visualizations in any assessment that the Plenary, at its sixth session, may decide to undertake:

(i) July-September 2018: information to assessment authors at their first author meetings of core and highlighted indicators for use in IPBES assessments and resources and support available to authors;

(ii) September 2018-May 2019: support to assessment authors in the preparation of the first order draft of the chapters of the assessments.

C. Approach to social-ecological bundles of indicators in IPBES assessments

12. The 30 core indicators did not sufficiently cover some of the components of the IPBES conceptu framework (set out in the annex to decision IPBES-2/4), including "nature's contributions to people" an "good quality of life", nor the relationships among the various components of the conceptual framework depicted by its arrows. Therefore, it was noted that complementary socioeconomic indicators were neede to represent those missing aspects of the IPBES conceptual framework. First steps were undertaken in 2016 to address these gaps (see information document IPBES/5/INF/5). The Multidisciplinary Expert Panel, at its 8th meeting, requested the continuation of the work on additional indicators with a socioecological focus for use in the global assessment for an even coverage of the IPBES conceptual framework, including the development of narratives to illustrate their role.

13. To support this requested further work, IPBES, with financial support from the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and SwedBio, convened a workshop on 6 and 7 April 2017 in Budapest, Hungary, back-to-back with a workshop of the values expert group that addressed the consideration of the conceptualization of multiple values in the global assessment of biodiversity and ecosystem services, and a meeting dedicated to advance indigenous and local knowledge across the chapters of the global assessment. The workshop resulted in the conceptualization of a more general approach to bringing together biophysical and socio-economic aspects, using the concept of bundles (i.e. sets) of indicators to integrate indicators representing different dimensions of a specific theme. The workshop participants illustrated the approach by selecting exemplary social-ecological bundles of indicators for five themes (biodiversity, global commons, health, food security and telecoupling). The list of participants in the workshop is contained in appendix I.

14. In response to the mandates of the task group on indicators and of the global assessment of biodiversity and ecosystem services, a follow up workshop was organized in Seoul, Republic of Korea, from 5 to 7 December 2017, with financial support from the Ministry of the Environment of the Republic of Korea, to pilot, test and further develop the approach regarding social-ecological bundles of indicators for a specific theme emerging from the global assessment, and to reflect on the use of social-ecological bundles of indicators in future IPBES assessments. The specific theme chosen for the piloting exercise wa the relationship between biodiversity and food, with particular attention to two main dimensions: production sustainability, access and diversity. The piloting exercise was expected to contribute, where feasible, to the preparation of the second order draft of the global assessment. The list of participants is set out in appendix II. It reflects the dual mandate to which the workshop was intended to respond, and included members of the Bureau, the Multidisciplinary Expert Group, the IPBES task group on indicators, the expert group undertaking the global assessment and, responding to the request from the IPBES Plenary for consultation with relevant multilateral environmental agreements, international processes and organizations, and a number of resource persons.

15. The outcomes of the workshop include the following:

(a) A preliminary list of dimensions (elements or components that define the theme that are relevant when considering the theme), sub-bundles (more specific issues that are components of the theme and more easily compartmentalized as sub-elements to the major theme), and indicators related to the relationship between biodiversity and food: sustainable production, diversity and access, for further consultation with experts within and outside of IPBES;

(b) Proposed guidance on the use of social-ecological bundles of indicators in future IPBES assessments, set out in appendix III, for consideration by the Multidisciplinary Expert Panel, with a view to the inclusion of the guidance into the IPBES guide for assessments.

16. The following activities are planned to be undertaken between the sixth and seventh sessions of the Plenary under this workstream:

(a) Further development of the list of dimensions, sub-bundles and indicators related to the relationship between biodiversity and food:

(i) February-March 2018: Consultation of the list by experts within and outside of IPBES;

(ii) End of March 2018: Finalization of a draft list of dimensions, sub-bundles and indicators based on inputs received during the consultation phase under the guidance of the co-chairs of the task force on knowledge and data, the members of the

Multidisciplinary Expert Panel that attended the workshop in Seoul, and the co-chairs of the global assessment;

(iii) June 2018: Endorsement of the list of dimensions, sub-bundles and indicators by the Multidisciplinary Expert Panel.

(b) Support, as appropriate, to the use of social-ecological bundles of indicators in the global assessment:

(i) March 2018: submission of the draft list of dimensions, sub-bundles and indicators to global assessment experts for their consideration and use in the assessment, as appropriate;

(ii) March-November 2018: Support, as feasible and appropriate, to authors of the global assessment in using the identified indicators in the global assessment from the technical support unit on knowledge and data;

(c) Support, as appropriate, to the use of the approach to social-ecological bundles of indicators in any assessment that the Plenary, at its sixth session, may decide to undertake, including:

(i) July-September 2018: Information of assessment authors at their first author meetings regarding the approach and resources and support available to authors;

(ii) September October 2018: A workshop with the task group on indicators and a limited number of assessment experts representing the various chapters to apply the approach to social-ecological indicators to these assessments, in line with the approach set out in appendix III, with the following objectives:

a. Identification of a bundle (i.e. a small set) of socio-economic and ecological key indicators for each theme emerging from the first author meetings (drawn from the lists of core and highlighted indicators, but also other data sources, that help to show status, trends and interlinkages, and can inform on the different perspectives of any one particular issue);

b. Identification of key aspects in the themes, for which there are no indicators currently available, and for which information on status and trends comes from other sources;

c. Identification of gaps, i.e. aspects of the themes for which no information sources are available;

d. Identification of relevant data providers.

(iii) October 2018 – May 2019: Support, as feasible and appropriate, to authors of the assessments in using the identified indicators in the assessments from the technical support unit on knowledge and data.

III. Web-based infrastructure in support of data and information management

17. According to its terms of reference, the responsibilities of the task force on knowledge and data include to support the secretariat in overseeing the management of the data, information and knowledge used in developing IPBES products so as to ensure their long-term availability and to identify opportunities for increasing access to existing data, information and knowledge. The task group on web-based infrastructure, since the fourth session of the Plenary, has conceptualized and overseen the development of web-based infrastructure as part of the IPBES website. The infrastructure provides IPBES members with key information, including relevant official documentation, IPBES catalogues, finalized deliverables and other products, and IPBES experts with information pertaining to their work, and the possibility of contacting relevant experts and stakeholders.

18. In July 2017, the new IPBES website was launched, which provides a number of improvements and new features, including:

(a) The catalogue of policy support tools was integrated into the IPBES website at www.ipbes.net/policy-support;

(b) Information on experts that serve as members of the Bureau, the Multidisciplinary Expert Panel, IPBES task forces and assessment expert groups, lists of national focal points, and members of the secretariat was centrally stored on the IPBES website. This has improved the management and updating of this information (see www.ipbes.net/experts);

(c) Inputs to and outputs from the IPBES work programme were also centrally stored on the IPBES website (see for example www.ipbes.net/dataset/methodological-assessment-scenarios-and-models-biodiversity-and-ecosystem-services);

(d) The user interface and general engagement of users were improved;

(e) The IPBES mailing list service was integrated as part of the IPBES website;

(f) Reliance on third party software was significantly reduced, e.g. for form submissions, surveys, or discussion forums (see for example www.ipbes.net/forum, also, the catalogue of policy support tools and methodologies is being developed as part of the IPBES website);

(g) Transparency and traceability were increased through indexing and maintenance of relevant logs on web content and activities;

(h) Domain authority and security were increased by ensuring that all links on the website are available and stable; that errors are resolved; down time is prevented; modules are up to date; spam accounts are blocked; and IPBES emails are not labelled as spam by mailing engines;

(i) Responsibilities for content management have been distributed among the secretariat, experts and other stakeholders by using workflows, permissions and user interfaces.

19. The following activities are planned to be undertaken between the sixth and seventh sessions of the Plenary under this workstream:

(a) The reinforced team at the secretariat will:

(i) Design, implement, test and make available for review of the task group additional features on the website;

(ii) Train programme staff at the secretariat and the technical support units to enhance the content of the website;

(iii) Further enhance the accessibility of the website for internal and external users;

(b) The task group on web-infrastructure will continuously review and provide advice on the implementation of these additional elements of the website.

IV. Knowledge generation catalysis

20. According to its terms of reference, the responsibilities of the task force on knowledge and data include to support the Bureau and the Multidisciplinary Expert Panel in reviewing the knowledge needs and gaps identified through Platform scoping processes and assessments and to catalyse the generation of new knowledge and data, in convening dialogues with scientific organizations, policymakers and funding organizations and in undertaking other activities to address those needs identified in the work programme. The terms of reference respond to one of the four functions of IPBES, as set out in the functions, operating principles and institutional arrangements of IPBES (resolution establishing IPBES, document UNEP/IPBES.MI/2/9, annex I, appendix I), which is to identify and prioritize key scientific information needed for policymakers at appropriate scales and catalyse efforts to generate new knowledge by engaging in dialogue with key scientific organizations, policymakers and funding organizations, but not directly undertake new research.

21. In decision IPBES-4/1, the IPBES Plenary approved the summaries for policymakers of the report of the assessment of pollinators, pollination and food production set out in annex II to the decision and the report of the methodological assessment of scenarios and models of biodiversity and ecosystem services set out in annex IV to the decision and accepted the individual chapters of the assessment reports and their executive summaries. In response to decisions IPBES-3/1 and IPBES-4/1, the regional assessments of biodiversity and ecosystems services, the assessment of land degradation and restoration, and the global assessment of biodiversity and ecosystem services are currently ongoing.

22. Between the fourth and the fifth sessions of the Plenary, the task force on knowledge generation had developed a process for catalysing the generation of new knowledge, which was presented to the Plenary in document IPBES/5/5, including the following three steps:

(a) Identification of gaps in knowledge, information and data in the IPBES work programme, and in completed assessments;

(b) Consultation on these gaps and the formulation of priority areas for knowledge generation with the scientific community;

(c) Tailoring of these priority research areas to potential research-funding institutions and their communication to these funding organizations, mainly by means of bilateral meetings.

23. Knowledge gaps were understood in this context to include information and major data gaps pertaining to global biodiversity.

24. Following the fifth session of the Plenary, the three steps were further developed by the task group and presented to the Multidisciplinary Expert Panel and the Bureau at their 9th sessions. The first step, identification of gaps in knowledge, information and data, was set out to include three elements: the development of a draft report on gaps in knowledge, information and data emerging from the assessment, an internal consultation on the report with the assessment experts more widely, and the preparation of a final report from the perspective of the assessment.

25. The Multidisciplinary Expert Panel and the Bureau, at their 9th meetings, decided, considering the good progress made by the expert group on scenarios and models in catalysing the generation of new knowledge based on the scenarios and models assessment (see table 4 on examples of activities catalysed by IPBES in 2017, in document IPBES/6/9), that the process for catalysing the generation of knowledge based on IPBES assessments should be piloted for the pollination assessment.

26. Following the 9th meetings of the Multidisciplinary Expert Panel and the Bureau, the secretariat consulted the co-chairs of the pollination assessment regarding the proposed process. The co-chairs offered to lead a comprehensive process of identifying knowledge gaps and draft research priorities, including a workshop to finalize the identification. This more systematic way of implementing step 1 required more preparatory time and the originally envisaged timeline was shifted allowing for the completion of the report on knowledge gaps emerging from the pollination assessment to be finalized by March 2018.

27. From 27-29 November 2017, a workshop was organized at the University of Reading, United Kingdom, to identify gaps in knowledge emerging from the pollination assessment, to develop next steps for the consultation of the identified gaps emerging from the pollination assessment and their communication and to further develop the general approach to the identification of gaps in knowledge from IPBES assessments. The list of participants in the workshop is set out in appendix IV and includes members of the task group on knowledge generation catalysis, the co-chairs and a number of experts of the pollination assessment and resource persons.

28. The outcomes of the workshop included the following:

(a) A list of gaps in knowledge emerging from the pollination assessment, for further consultation;

(b) Next steps for the consultation regarding the gaps emerging from the pollination assessment and their communication;

(c) A proposal for a further developed general approach to the identification of gaps in knowledge emerging from IPBES assessments, set out in appendix V.

29. The participants of the workshop, under the guidance of the co-chairs of the pollination assessment, identified a list of knowledge gaps emerging from the pollination assessment. As a method, they used a modified Delphi approach for systematic forecasting and built on the experience of team members with similar processes led by the European Union. The modified Delphi method involved experts scoring and commenting independently and anonymously in early rounds of surveys followed by an in-person facilitated discussion of the results at the workshop in Reading. This continuation of the survey in Reading, with a smaller subset of experts, built on a larger process initiated in 2015 with the entire group of authors of the pollination assessment in order to have scores reflect a geographic and expertise balance.

30. The task group on knowledge generation prepared a proposal for a further developed general approach to the identification of gaps in knowledge emerging from IPBES assessments, which is set out in appendix V. The task group recommends focussing on the identification of knowledge gaps throughout the assessment process, and proposes concrete elements to this approach. The Multidisciplinary Expert Panel and the Bureau, at their 11th meetings, will be invited to consider this proposal and whether it should become part of the IPBES guide for assessments.

31. The following activities are planned to be undertaken between the sixth and seventh sessions of the Plenary under this workstream:

(a) Work regarding knowledge gaps and needs emerging from the pollination assessment:

(i) March 2018: Communication of the list of knowledge gaps to governments and stakeholders in preparation for an e-conference to widely consult on these knowledge gaps;

(ii) April 2018: Organisation of an e-conference to widely consult on the list of identified knowledge gaps (pollination assessment) with governments and stakeholders. The e-conference will be facilitated by experts, supported by secretariat;

(iii) May 2018: Revision of the list of knowledge gaps (pollination assessment) under the guidance of the co-chairs of the pollination assessment to reflect the outcomes of the e-conference;

(iv) June 2018: Submission of the revised list of knowledge gaps (pollination assessment) to the Multidisciplinary Expert Panel for their endorsement during their 11th meetings;

(v) July 2018 – May 2019: Engagement, by secretariat, with strategic partners in activities to catalyse the generation of knowledge in the areas endorsed by the Multidisciplinary Expert Panel (pollination assessment);

(b) Work regarding knowledge gaps and needs emerging from the land degradation and restoration assessment:

(i) April 2018-September 2018: Identification by the co-chairs of the assessment of land degradation and restoration of an initial draft set of knowledge gaps arising from that assessment;

(ii) September 2018: Workshop to further identify gaps, based on the draft set of knowledge gaps (land degradation and restoration assessment), with assessment experts, resource persons, and the task group on knowledge generation;

(iii) January 2019: Submission of the revised list of knowledge gaps (land degradation and restoration assessment), to governments and stakeholders in preparation for an e-conference to widely consult on these knowledge gaps;

(iv) February 2019: Organisation of an e-conference to widely consult on the list of knowledge gaps (land degradation and restoration assessment) with governments and stakeholders. The e-conference will be facilitated by experts, supported by secretariat.

(c) Work regarding knowledge gaps and needs emerging from the regional and global assessments:

(i) May-June 2018: Collection of suggestions for broad thematic areas for the identification of knowledge gaps emerging from the regional assessments and the global assessment of biodiversity and ecosystem services during the regional consultations on the second work programme and the second order draft of the global assessment, if the Plenary, at its sixth session, approves such consultations;

(ii) July 2018 – May 2019: Development of a proposal for a comprehensive process to identify knowledge gaps emerging from the regional assessments and the global assessment of biodiversity and ecosystem services in 2019.

(d) Work regarding knowledge gaps and needs emerging from pending assessments to be started in 2018:

(i) July-December 2018: development of an online document survey in support of the ongoing identification of knowledge and data gaps throughout the assessment process;

(ii) 2019: submission of the list of identified knowledge and data gaps to governments and stakeholders, possibly as part of the first peer-review of the assessment draft report;

(iii) Late 2019: summary of lessons learned in the identification of knowledge and data gaps emerging from the pollination assessment, the land degradation and restoration assessment, and the regional and global assessments.

V. Collaboration with partner organizations

32. In its decision IPBES-5/1, the Plenary encouraged the task force to develop terms of reference to specify the modalities of its collaboration on specific tasks with partner organizations. The modalities for collaboration with partner organizations are set out in appendix VI. The text of memoranda of understanding concluded by the IPBES secretariat are available at www.ipbes.net/document-library-categories/agreements. The in-kind contributions of partner organizations are acknowledged in document IPBES/6/9 on financial and budgetary arrangements for the Platform.

VI. Meetings planned for 2018

33. The two workshops suggested for 2018, on indicators and on knowledge generation, are planned to be held back-to-back over five days, with one overlapping day, in September or October 2018. Members of the respective task groups will be invited. Members of the task group on web-based infrastructure will be invited to join either meeting, according to their expertise. A session to reflect on the work of the task force during the first work programme will be organized during the overlapping day.

Appendix I

List of participants in the workshop on IPBES indicators from a socio-economic perspective (Budapest, Hungary, 6–7 April 2017)

	Name	Role	Region
1	Aidin Niamir	Expert, global assessment	Asia-Pacific
2	Alexander Oudenhoven	Expert, global assessment	Western Europe and Others
3	Anna Chenery	Task group on indicators	Western Europe and Others
4	Belinda Reyers	Expert, global assessment	Africa
5	Berta Martin Lopez	Expert, regional assessment for Europe and Central Asia	Western Europe and Others
6	Cornelia Krug	Task group on indicators, resource person, Future Earth	-/-
7	Cynthia Zayas	Expert, global assessment	Asia-Pacific
8	Eszter Kelemen	Expert, regional assessment for Europe and Central Asia	Eastern Europe
9	HyeJin Kim	Resource person, GEO BON	-/-
10	Katia Heubach	Expert, regional assessment for Africa	Western Europe and Others
11	Lucas Garibaldi	Expert, global assessment	Latin America and the Caribbean
12	Marie Stenseke	Multidisciplinary Expert Panel	Western Europe and Others
13	Matthias Schroter	Expert, regional assessment for Europe and Central Asia	Western Europe and Others
14	Nidhi Nagabhatla	Task group on indicators, expert, global assessment	Asia-Pacific
15	Patricia Balvanera	Task group on indicators, expert, global assessment	Latin America and the Caribbean
16	Suneetha Subramanian	Expert, global assessment	Asia-Pacific
17	Susan Preston	Expert group on values	Western Europe and Others
18	Unai Pascual	Multidisciplinary Expert Panel	Western Europe and Others
19	Zsolt Molnar	Expert, global assessment	Eastern Europe
20	Jeong Eun (Anya) Lim	Technical support unit for knowledge and data	-/-
21	Jihyun Yoon	Technical support unit for knowledge and data	-/-
22	David Gonzalez	Technical support unit for values	-/-
23	Sung-Ryong Kang	Technical support unit for knowledge and data	-/-
24	Hien Ngo	Technical support unit for the global assessment	-/-
25	Simone Schiele	Secretariat	-/-

Appendix II

List of participants in the workshop on social-ecological bundles of indicators: Assessing the relationship between biodiversity and food: sustainable production, diversity and access (Seoul, Republic of Korea, 5–7 December 2017)

	Name	Role	Region
1	Youngbae Suh	Bureau, co-chair task force on knowledge and data	Asia-Pacific
2	Marie Stenseke	Co-chair, Multidisciplinary Expert Panel	Western Europe and Others
3	Mark Lonsdale	Multidisciplinary Expert Panel	Western Europe and Others
4	Katalin Török	Multidisciplinary Expert Panel	Eastern Europe
5	Unai Pascual	Multidisciplinary Expert Panel	Western Europe and Others
6	Eduardo Brondizio	Co-chair, global assessment	Latin America and the Caribbean
7	Sandra Díaz	Co-chair, global assessment	Latin America and the Caribbean
8	Cornelia Krug	Task group on indicators, resource person, Future Earth	-/-
9	Nidhi Nagabhatla	Task group on indicators	Asia-Pacific
10	Luthando Dziba	Task group on indicators	Africa
11	Patrick O'Farrell	Expert, global assessment	Africa
12	Aidin Niamir	Expert, global assessment	Asia-Pacific
13	Tuyeni Mwampamba	Expert, global assessment	Africa
14	Osamu Saito	Expert, global assessment	Asia-Pacific
15	Kate Brauman	Expert, global assessment	Western Europe and Others
16	Ralf Seppelt	Expert, global assessment	Western Europe and Others
17	Nora Castañeda	Resource person, Crop Trust	-/-
18	Jessica Raneri	Resource person, Bioversity international	-/-
19	Kwan-Seong Song	Ministry of Environment, Republic of Korea	Asia-Pacific
20	Jieun Yang	Ministry of Environment, Republic of Korea	Asia-Pacific
21	Jeongkyu Kim	National Institute of Ecology	Asia-Pacific
22	Eunjin Park	National Institute of Ecology	Asia-Pacific
23	Min-Hwan Park	National Institute of Ecology	Asia-Pacific
24	HyunSung Shin	National Institute of Ecology	Asia-Pacific
25	Jackie Kang	Technical support unit for knowledge and data	-/-
26	Jihyun Yoon	Technical support unit for knowledge and data	-/-
27	Jeong Eun (Anya) Lim	Technical support unit for knowledge and data	-/-
28	Sarang Lee	Technical support unit for knowledge and data	-/-
29	David Gonzalez	Technical support unit for values	-/-
30	Simone Schiele	Technical support unit for the global assessment	-/-
31	Hien Ngo	Secretariat	-/-

Appendix III

Proposed guidance on the use of social-ecological bundles of indicators in future IPBES assessments

1. The workshop on social-ecological bundles of indicators "Assessing the relationship between biodiversity and food: sustainable production, diversity and access" organized in Seoul, Republic of Korea, from 5 to 7 December 2017, had the objectives to pilot, test and further develop the approach regarding social-ecological bundles of indicators for a specific theme emerging from the global assessment; and to reflect on the use of social-ecological bundles of indicators in future IPBES assessments. As outcome of their deliberations under the second objective, the participants in the workshoprecommend a question-driven approach for future IPBES assessments, and suggest the following elements for consideration by the Multidisciplinary Expert Panel and the Bureau, with a view to their possible inclusion as part of the guide for assessments:

(a) The scoping document is the foundation of an IPBES assessment. The scoping document presents several policy-relevant questions, derived, e.g., from scenarios, the conceptual framework, a survey of the relevant initiatives or consultations with different groups of stakeholders, that should be addressed by the assessment. The identification of major themes for an assessment and the associated needs for indicator and data analysis could commence as part of the scoping process.

(b) In the meeting of the management committee of an assessment that is held in preparation of the first author meeting of the assessment, the scoping document questions could be discussed, and refined if needed, to ensure that they provide good guidance. In doing, so the management committee could also identify preliminary themes to be addressed by the assessment. For each of these themes, an overarching set of questions could be formulated, capturing the essence of the problems addressed, including the linkages to globally agreed goals relevant to the assessment, such as the SDGs, relevant UN Resolutions, targets under the Strategic Plan for Biodiversity, etc.

(c) At the first author meeting, the draft preliminary themes and questions could be discussed, as preparation for a key task of this meeting: the development of a framework for the summary for policymakers. Sub-themes could be identified by each chapter.

(d) For each theme, a bundle (i.e. a small set) of socio-economic and ecological key indicators could be identified, using the IPBES conceptual framework as a guide. These bundles may be drawn from the existing IPBES list of core and highlighted indicators, but also from other data sources, that help to show status, trends and interlinkages (e.g. feedback loops), and can inform on the different perspectives of any one particular issue (e.g. different world views, different stakeholders, different knowledge systems). Key aspects in the themes, for which there are no indicators currently available, and for which status and trends have to be searched for in other ways, could also be identified. Gaps could also be identified and additional experts brought on board in a timely fashion as authors. Relevant data providers would be identified at an early stage, partnerships built and syntheses based on existing data could be conducted.

(e) None of this process would preclude the emergence of new questions at a later stage, which would of course require new sources and new bundles of indicators.

(f) At the second author meeting, the drafts of the summaries for policymakers could be expanded with interim answers to the key questions based on the work done so far. These would be reviewed at this meeting and modified as necessary.

(g) The major themes would form the backbone of the assessments. The themes and indicators identified would be used across chapters where appropriate. The themes and the bundles of indicators would serve as an important base for the summary for policymakers and the corresponding visuals.

2. In summary, the participants in the workshop recommend for future IPBES assessments, to:

(a) Ensure that specific policy-relevant questions are included in the scoping report for consideration by the Plenary;

(b) Develop a draft framework for the summary for policymakers early in the assessment process, e.g. at the first author meeting, unpacking the set of policy-relevant questions, into major themes for the assessment, and relevant sub-themes for each chapter;

(c) Identify, based on that framework for the summary for policymakers, early in the assessment process, the bundles of indicators needed and existing related data and analyses to support the evidence-base for the summary for policymakers;

(d) Ensure, early in the process, that necessary expertise across disciplines, datatypes and sources of knowledge is available in the expert group to support the assessment process, and fill gaps in expertise as appropriate.

Appendix IV

List of participants in the workshop on identification of gaps in knowledge from IPBES assessments (Reading, UK, 27–29 November 2017)

	Name	Role	Region
1	Simon Potts	Assessment co-chair	Western Europe and Others
2	Vera Imperatriz-Fonseca	Assessment co-chair	Latin America and the Caribbean
3	Colleen Seymour	Assessment expert	Africa
4	Michael Lattorff	Resource person	Africa
5	Steven Johnson	Resource person	Africa
6	Damayanti Buchori	Assessment expert	Asia-Pacific
7	Jiandong An	Resource person	Asia-Pacific
8	Yong Jung Kwon	Resource person	Asia-Pacific
9	Parthiba Basu	Resource person	Asia-Pacific
10	Thingreiphi Lungharwo	Resource person	Asia-Pacific
11	Aniko Kovacs	Assessment expert	Eastern Europe
12	Leonardo Galetto	Assessment expert	Latin America and the Caribbean
13	Lucas Garibaldi	Assessment expert	Latin America and the Caribbean
14	Marcelo Aizen	Assessment expert	Latin America and the Caribbean
15	Adam Vanbergen	Assessment expert	Western Europe and Others
16	Barbara Gemmill-Herren	Assessment expert	Western Europe and Others
17	Brad Howlett	Assessment expert	Western Europe and Others
18	Lynn Dicks	Assessment expert	Western Europe and Others
19	Tom Breeze	Assessment expert	Western Europe and Others
20	Deepa Senapathi	Resource person	Asia-Pacific
21	Andras Baldi	Task group on knowledge generation catalysis	Eastern Europe
22	Catherine Laurent	Task group on knowledge generation catalysis	Western Europe and Others
23	Nidhi Nagabhatla	Task group on knowledge generation catalysis	Asia-Pacific
24	Mialy Andriamahefazafy	Task group on knowledge generation catalysis	Africa
25	Cornelia Krug	Task group on knowledge generation catalysis, resource person, Future Earth	n/a
26	Tim Hirsch	Task group on knowledge generation catalysis, resource person, Secretariat of the Global Biodiversity Information Facility	n/a
	Monica Kobayashi	Resource person, Secretariat of the Convention on Biological Diversity	n/a
27	Sarang Lee	Technical support unit for knowledge and data	n/a
28	Hien Ngo	Secretariat	n/a
29	Thomas Koetz	Secretariat	n/a

Appendix V

Proposal to further develop the approach to catalyse the generation of new knowledge

This appendix presents the outcome of the meeting of the task group on catalyzing the generation of new knowledge, which met in Reading, UK, 27-29 November 2018. This draft will be considered by the Multidisciplinary Expert Panel and the Bureau at their next meeting in June 2018.

A. Introduction and general considerations

1. The IPBES approach to identifying knowledge gaps and needs and catalysing knowledge generation should be transformational and shape future directions of research and other forms of knowledge mobilization and generation relevant to biodiversity, its sustainable management and nature's contributions to people. Identified knowledge gaps needs should therefore include:

(a) Gaps/needs related to policy formulation and implementation at various levels of governance, including local, national regional and global levels;

(b) Gaps needs to be addressed during assessment process; gaps to be addressed in the medium-term (within 5 years); and in the long-term (within 10 years and beyond);

(c) Gaps/needs from various scientific disciplines, including natural and social sciences and humanities, and from different knowledge systems, including indigenous and local knowledge;

(d) Gaps/needs relating to the availability and accessibility of data, research and understanding of a topic, and the capabilities and infrastructure to address knowledge gaps/needs;

(e) Gaps/needs relating to access, mobilisation and generation of knowledge and data;

(f) Gaps needs ranging from broad, general areas to more specific aspects and topics.

2. The knowledge gaps and needs identified through the approach should be addressed to:

(a) Organizations mobilizing or generating knowledge and data;

(b) Organizations funding activities to mobilize or generate knowledge and data; and

(c) Users of knowledge and data that will have been mobilised or generated based on the gaps and needs identified by IPBES.

3. These organizations and users include scientific organisations, natural history museums, organisations mobilising citizen science as well as indigenous and local knowledge, funding organisations, the private sector and policymakers and other practitioners.

4. To strengthen the process regarding its relevance and effectiveness it is suggested that representatives covering the range of these actors should be integrated and engaged within the processes from the beginning.

5. The approach to identifying knowledge gaps and catalysing knowledge generation focuses currently on the identification of knowledge gaps arising from the assessment process. In the future, appropriate ways could be developed to include knowledge gaps and needs emerging from other functions of IPBES, in particular related to policy support tools and capacity building.

B. Identification of knowledge gaps

6. The first step of the process that had been presented in document IPBES/5/5, work on knowledge and data (deliverables 1 (d) and 4 (b)), was the identification of gaps in knowledge, information and data in the IPBES work programme, and in completed assessments. It is suggested to begin identifying knowledge gaps at the scoping stage.

7. The IPBES conceptual framework serves as frame of reference for the identification of knowledge gaps. In the case of assessments, the process of identifying knowledge gaps should be further guided by the scope of each assessment and in particular by the key policy relevant questions of the assessment.

8. The task group on knowledge generation recommends that this step could commence during the assessment process and, where feasible, even during the scoping phase of an assessment and include the following elements:

(a) Ongoing identification of knowledge gaps by experts throughout the assessment process:

(i) During the scoping process of an assessment, experts could be encouraged to identify knowledge needs and major gaps related to the proposed key policy-relevant questions being developed as part of the scoping report;

(ii) In the beginning of the assessment process, the scoping document, and in particular the key policy-relevant questions set out in the scoping document, could be used to further identify the knowledge needed and available to answer these questions;

(iii) At an advanced stage of an assessment process, the confidence levels of the key messages can indicate knowledge gaps where the level of agreement or the quantity or quality of the evidence are low;

(iv) Gaps related to relevant issues that cannot be covered by key messages due to a lack of information could be identified throughout the assessment process;

(b) Ongoing recording of knowledge gaps throughout the assessment process:

(i) Knowledge needs and major gaps identified as part of the scoping process could form part of the scoping report;

(ii) An easily accessible online document survey, structured to reflect the overall scope of the assessment and all relevant elements to be captured by the identification of gaps (see paragraph 11), could be made available to assessment authors to record any gaps identified throughout the assessment process;

(iii) The lists of gaps identified by assessment experts could become part of the material submitted for peer-review of the first and second order drafts of the assessment;

(c) Addressing knowledge gaps:

(i) Some gaps identified in the beginning of the assessment process and communicated as part of the scoping report or of the review of the first order draft of an assessment could be addressed within the timeframe of an assessment;

(ii) The gaps identified during the assessment process that still exist once the assessment has been approved, would be consolidated in a comprehensive list and form the basis for the consultation in the next step.

C. Consultation on knowledge needs

9. The second step of the process that had been presented in document IPBES/5/5 was the consultation on these gaps and the formulation of priority areas for knowledge generation. The task force on knowledge and data and the Multidisciplinary Expert Panel had advised earlier that this consultation could take place in the form of an e-conference and involve all relevant stakeholders, including the scientific community and policymakers.

10. The consolidated and comprehensive list of knowledge gaps identified in the course of the assessment process would provide the basis to structure an e-conference for broader consultation and formulation of knowledge needs.

11. The task group on knowledge generation recommends that the organization of the e-conference could include the following elements:

(a) The consolidated and comprehensive list of knowledge gaps identified in the course of the assessment process could be shared with governments and stakeholders well in advance of the e-conference (e.g. 4-6 weeks) to allow participants in the e-conference to prepare;

(b) The e-conference could be held over a period of 2-3 weeks;

(c) The e-conference is suggested to be chaired by the co-chairs of the respective assessment and to be facilitated by the secretariat. Efforts should be undertaken to ensure the engagement of relevant representatives of the key categories of actors identified for this approach (generators/mobilisers of

knowledge and data, funders of activities generating mobilising knowledge and data, and users of such knowledge) to ensure active participation and focussed results.

12. A final draft document with priority areas would be prepared for endorsement by the Multidisciplinary Expert Panel, taking into account the results of the e-conference. It is envisaged to entail a range of types and granularities of knowledge gaps and needs, with the view to be useful to as broad an audience as possible. Following its endorsement, this document would be made public and shared as widely as possible. It could also form the basis for a scientific publication.

D. Catalysing the generation of new knowledge

13. The third step of the process that had been presented in document IPBES/5/5 was the tailoring of the priority research areas to potential research-funding institutions and their communication to these funding organizations. Earlier, the task force and the Multidisciplinary Expert Panel had considered that the engagement with organizations mobilizing or generating knowledge and organizations funding activities to mobilize or generate knowledge would mainly take place by means of bilateral meetings.

14. The task group on knowledge generation recommends that in addition to the bilateral engagement, a face-to-face meeting bringing together relevant representatives of the key categories of generators/mobilisers of knowledge and data, funders of activities generating mobilising knowledge and data, and users of such knowledge could be considered. A meeting could foster, in particular, collaboration among various actors to undertake activities to address the identified gaps.

E. Institutional arrangements

15. The implementation of the approach would be supported by the task group on knowledge generation within the respective contexts, e.g. a specific assessment.

16. Resource persons to the task group could include representatives of organizations from the key categories of actors (generators mobilisers of knowledge, funders of activities generating mobilising knowledge, and users of such knowledge) to support the implementation of the approach.

Appendix VI

Modalities for collaboration with partner organizations

Organization	Role	Modalities
Future Earth	- Provision of support to the evaluation of indicators regarding their relevance for IPBES assessments - Provision of support in gathering relevant expertise and helping to identify and mobilize specialized experts - Provision of support to the knowledge generation function	- Organization of IPBES-relevant expert workshops - Resource persons to task force - Memorandum of Understanding
United Nations Environment -World Conservation and Monitoring Centre (UNEP-WCMC) in its function as the secretariat of the Biodiversity Indicators Partnership (BIP)	- Provision of technical support to the technical support unit and task group on knowledge and data regarding the use of the core indicators that are provided by members of the partnership	- Management of the interaction between IPBES and BIP members; - Resource persons to task force - IPBES Secretariat participates in steering committee of BIP
Global Biodiversity Information Facility	- Provision of support to IPBES assessments in identifying and accessing relevant biodiversity datasets, in particular with regard to data provision for indicators - Provision of support for catalysing generation of new knowledge, through mobilization of data to address identified knowledge gaps	- Resource persons to task force - Memorandum of Understanding
The Group on Earth Observations – Biodiversity Observation Network	- Provision of support to the use of indicators and data in IPBES assessments	- Resource persons to task force - Memorandum of Understanding
The Food and Agriculture Organization of the United Nations (FAO)	- Provision of support to the use of indicators in IPBES assessments by making available fact sheets for the various indicators, supplying related data and collaborating with the task group on the preparation of visualizations	- Collaborative partnership arrangement to establish an institutional link between the Plenary and UNEP, UNESCO, FAO and UNDP
United Nations Educational, Scientific and Cultural Organization (UNESCO) Intergovernmental Oceanographic Commission of UNESCO (IOC-UNESCO)	- Provision of support to the knowledge generation function - Contribution of data to the global assessment through the Ocean Biogeographic Information System	- Collaborative partnership arrangement - Collaborative partnership arrangement through UNESCO
United Nations Development Programme (UNDP)	- Provision of support to the knowledge generation function through trialogues on IPBES assessments	- Collaborative partnership arrangement
Inter-American Institute for Global Change Research (IAI)	- Provision of support to the knowledge generation function (through its science programmes)	- Memorandum of Understanding
The Biodiversity Indicators Partnership BioTime	- Provision of support to the use of indicators in IPBES	- Correspondence with the BIP Secretariat or IPBES technical

Organization	Role	Modalities
The University of St. Andrews	assessments by making available fact sheets for the various indicators, supplying related data and collaborating with the task group on the preparation of visualizations	support unit for knowledge and data Acknowledgement as in-kind support in budget documentation and on web site
BirdLife International		
The Commonwealth Scientific and Industrial Research Organization (CSIRO)		
Forest Stewardship Council		
Global Footprint Network		
German Centre for Integrative Biodiversity Research		
Indicators for the Seas programme (IndiSeas)		
Institute of Social Ecology at the Alpen Adria University in Vienna		
International Union for Conservation of Nature (IUCN)		
The Map of Life		
Marine Stewardship Council (MSC)		
Organization for Economic Cooperation and Development (OECD)		
The Netherlands Environmental Assessment Agency (PBL)		
Programme for the Endorsement of Forest Certification (PEFC)		
Projecting Responses of Ecological Diversity in Changing Terrestrial Systems (PREDICTS) collaborative project		
Sea Around Us research initiative		
Secretariat of the Convention on Biological Diversity (CBD)		
Terralingua, the Tropical Ecology Assessment and Monitoring (TEAM) network		
United Nations Statistics Division		
UNEP-WCMC		
Water Footprint Network		
The World Bank		
The World Resources Institute (WRI)		
The World Wildlife Fund (WWF)		
The Yale Center for Environmental Law and Policy		
The Zoological Society of London (ZSL)		

UNITED NATIONS

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Food and Agriculture Organization of the United Nations

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Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
Sixth session
Medellín, Colombia, 18–24 March 2018
Item 5 of the provisional agenda*

Report of the Executive Secretary on the implementation of the first work programme for the period 2014–2018

Information on further work related to scenarios and models of biodiversity and ecosystem services (deliverable 3 (c))

Note by the secretariat

1. In section V of decision IPBES-4/1, the Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) approved the summary for policymakers of the report of the methodological assessment of scenarios and models of biodiversity and ecosystem services set out in annex IV to that decision and accepted the chapters of the report and their executive summaries (IPBES/4/INF/3/Rev.1).

2. In the same decision, the Plenary requested the Multidisciplinary Expert Panel to oversee further work related to scenarios and models focusing on two activities described in the terms of reference set out in annex V to the decision, and to appoint an expert group to perform that work. The Plenary also requested the Executive Secretary to make the necessary institutional arrangements as outlined in the terms of reference. The two activities set out in the terms of reference consisted of providing expert advice to relevant expert groups of the Platform, in particular those undertaking assessments, on the use of existing scenarios and models to address the current needs of the Platform (activity 1); and catalysing the development of scenarios and associated models by the broader scientific community for the future work of the Platform (activity 2).

3. At its seventh meeting, in June 2016, the Multidisciplinary Expert Panel endorsed a detailed workplan for the second phase of the work on scenarios and models, to implement the two above-mentioned activities, and approved the composition of the expert group to perform that work.

4. The annex to the present note, which is presented without formal editing, sets out information on the work of the expert group.

* IPBES/6/1

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Annex

Information on further work related to scenarios and models of biodiversity and ecosystem services

I. The expert group on scenarios and models

1. The expert group, approved by the Panel at its seventh meeting (June 2016), is co-chaired by Carolyn Lundquist and Henrique Pereira. Paul Leadley and Marie Stenseke, from the Multidisciplinary Expert Panel (MEP), and Asghar Mohammadi Fazel and Robert Watson, from the Bureau, are overseeing progress on behalf of the MEP and Bureau, respectively.

2. The technical support unit (TSU) for the IPBES work on scenarios and models, based at PBL – the Netherlands Environmental Assessment Agency, is continuing its support during this second phase of work, and will do so until the end of the first work programme. Its members include Rob Alkemade, Elke den Belder and, since 6 November 2017, Machteld Schoolenberg and Anja Meerbeek.

II. Activity 1

Supporting the use of scenarios and models in IPBES assessments: Progress and next steps

A. Specific support to assessments expert groups

3. On behalf of the expert group on scenarios and models, the TSU is providing technical support to chapters 4 and 5 of the global assessment. The TSU organized and hosted a meeting for chapter 5 of the global assessment on 7-10 February 2017 in Den Haag, the Netherlands. The main aim of the meeting was to work on the development of the first order draft of the chapter. In total 24 authors, a MEP member, two co-chairs and TSU staff attended the meeting. A member of the TSU also attended the meeting of chapter 4 of the Global Assessment on 27 February-3 March 2017 in Aix-en-Provence, France. Members of the TSU attended the second author meeting of the global assessment on 18-22 September 2017 in Cape Town, South Africa and provided support to chapters 4 and 5, as well as administrative support.

4. The expert group supported by the TSU scenarios and models, has been providing advice to the authors of the chapters 5 of the regional assessments and chapter 7 of the land degradation and restoration, aiming for consistency across all assessments. Members of the TSU on scenarios and models attended the third author meetings of the regional assessments of Asia and the Pacific and Europe and Central Asia (24-28 July 2017) to provide support to the chapters 5 of the assessments and insights into the similarities and differences between the scenarios and models chapters of the different regions.

B. Additional work in support of IPBES assessments

5. The TSU on scenarios and models has been working on mobilising research groups to apply a range of the Shared Socioeconomic Pathways (SSP) scenarios of the Intergovernmental Panel on Climate Change (IPCC) to a variety of biodiversity and ecosystem services models in a consistent and harmonized fashion. In total, 14 research groups are participating in this task. A workshop on 'Biodiversity and Ecosystem Services Scenarios for IPBES using the SSPs' was held on 4-6 October 2017 in iDiv, Leipzig, Germany. At the workshop, the experts agreed on a timeline to provide outputs of the models to chapters 4 and 5 of the IPBES global assessment by December 2017 to be included in their second order drafts.

6. In line with the aforementioned activity, the TSU and expert group on scenarios and models have also been working on mobilising IPBES stakeholders to identify policy options to enrich the SSP scenarios by developing an online questionnaire which was made available on the IPBES website. The questionnaire was filled in by 174 stakeholders and the results were analysed by the expert group. These outputs will serve as an input to chapters 4 and 5 of the global assessment as well as input to activity 2 of this group on catalysing the further development of scenarios and models.

7. A scenarios and models session was organized by the expert group and TSU at the stakeholder day at the fifth IPBES Plenary (6 March 2017, Bonn, Germany). The aim of the session was to inform IPBES stakeholders on results of the methodological assessment on scenarios and models for biodiversity and ecosystem services and the way forward for IPBES scenario development. The expert group also organized breakout sessions to consult stakeholders on identifying policy options in line with the activity mentioned in paragraph 9.

8. The expert group on scenarios and models, with support from the TSU, is currently working on developing an evolving guide for the IPBES community on the use of scenarios and models. The guide aims to provide advice to all IPBES expert teams, in particular to those working on the thematic, regional and global assessments, as well as to the broader scientific community. The evolving guide will be an online toolbox developed in close collaboration with the experts developing the catalogue of policy support tools and methodologies (deliverable 4 (c)). To initiate this collaboration, the TSU for scenarios and models met with experts from deliverable 4(c) on 17 January 2017 in Brussels, Belgium. In addition, the expert group on scenarios and models developed a survey aiming to obtain feedback from authors from the regional, land degradation and restoration and global assessments on their experiences in their respective assessments and their needs in regards to scenarios and models. Based on the results of the survey, the expert team is currently working on an online structure and on the content of the evolving guide.

C. Next steps in the provision of technical support to ongoing assessments

9. The TSU for scenarios and models will continue to provide technical support for chapters 4 and 5 of the global assessment.

10. The results from the activity on "Biodiversity and ecosystem services scenarios for IPBES using the SSPs" will be published in a special issue of a journal. The results of the activity on "policy options" will also be published in a scientific journal.

11. The expert group on scenarios and models, with support from the TSU, will continue the work on the evolving guide.

III. Activity 2

Catalysing the development of scenarios and models by the broader scientific community: Progress and next steps

A. Second workshop on the way forward for IPBES scenario development

12. The IPBES methodological assessment of scenarios and models of biodiversity and ecosystem services highlighted the lack of existing scenarios that fully meet the needs of IPBES. The expert group on scenarios and models, supported by the TSU, has been facilitating the process to identify, together with relevant stakeholders, gaps in existing scenarios and models. These gaps include issues not addressed in existing scenarios that are relevant for biodiversity and ecosystem services and specific elements of biodiversity and ecosystem services.

13. To initiate this process, the TSU, together with the German Centre for Integrative Biodiversity Research (iDiv) organised a first scenario workshop in Leipzig from 3 to 7 October 2016. The workshop was co-funded by IPBES and iDiv. The workshop resulted in the writing of the scientific paper "Multiscale scenarios for nature and nature's contributions to people" which presents a way forward for IPBES scenario development. The paper has now been published in the Journal "Nature, Ecology & Evolution"[1]. The workshop paved the way forward for scenario development for IPBES through identifying short-, medium- and long-term activities regarding the use of scenarios in IPBES.

14. To initiate the process of development of IPBES scenarios, the expert group on scenarios and models, supported by the TSU, organized a workshop on "New visions for nature and nature's

[1] Isabel M. D. Rosa, Henrique M. Pereira, Simon Ferrier, Rob Alkemade, Lilibeth A. Acosta, H. Resit Akcakaya, Lucie den Belder, Asghar M. Fazel, Shizuchiro Fujimori, Mike Harfoot, Khaled A. Harhash, Paula A. Harrison, Jennifer Hauck, Rob J. J. Hendriks, Gladys Hernandez, Walter Jetz, Sylvia I. Karlsson-Vinkhuyzen, Hyejin Kim, Nicholas King, Marcel J. J. Kok, Grygoriy O. Kolomytsev, Tanya Lazarova, Paul Leadley, Carsten J. Lundquist, Jaime Garcia Marquez, Carsten Meyer, Lucinda M. Navarro, Carsten Nesshover, Hien T. Ngo, Kanchaphonne N. Ninan, Maria G. Palomo, Laura M. Pereira, Garry D. Peterson, Ramon Pichs, Alexander Popp, Andy Purvis, Federica Ravera, Carlo Rondinini, Jyothis Sathyapalan, Aafke M. Schipper, Ralf Seppelt, Josef Settele, Nadia Sitas and Detlef van Vuuren, 2017. Multiscale scenarios for nature futures. *Nature Ecology and Evolution* 1: 1416-19.

contributions to people for the 21st century" on 4-8 Sept. 2017 in Auckland, New Zealand. The workshop was hosted at the University of Auckland, and was kindly co-funded by the New Zealand Ministry for Business, Innovation and Employment's Catalyst: Seeding fund, the National Institute of Water & Atmospheric Research (NIWA), and others. The workshop engaged 73 participants with a diversity of views on nature and its contributions to people from international organizations, governments, the private sector, indigenous and local communities, non-governmental organizations and the wider scientific community from the local to global scale. The three following key questions were addressed: 1) *What visions (may be multiple) exist on nature (biodiversity) and nature's contributions to people (ecosystem services)?* 2) *What future "positive" scenarios can be built based on these multiple visions?* 3) *What is required to inform decision makers to address potential changes in biodiversity and ecosystem services?*

15. The participants in the workshop were selected to represent a diversity of views on nature and nature's contributions to people, and to obtain a broad set of visions, to ensure legitimacy for the process and to avoid biases. Selection criteria included representation from different sectors (governments and international organizations, private sector, interest groups and NGOs, indigenous and local communities, and the wider scientific community), regions, professional backgrounds (social, technological, ecological, economics), ages and genders. The list of participants can be found in the full report (in preparation), summarized in Appendix II.

16. This visioning workshop initiated the development of the next generation of scenarios by exploring alternative visions to reach intertwined global targets, including synergies and trade-offs between nature conservation and other development goals such as the United Nations Sustainable Development Goals, and interaction across nature, nature's contributions to people, and human well-being. Using participatory approaches, seven visions emerged, as follows: Nature-Based Inclusive Prosperity; Sustainable Food Systems; Rewilding and rebooding urban rural flows; Healthy Socio-Ecological Freshwater Systems; A Tasty World with Values; Dancing with Nature; and Healthy Oceans, Happy Communities. The detailed report from the workshop, which is in preparation, will serve as a basis for the further development of the scenarios. A summary can be found in Appendix II.

17. This workshop was the first step in a process to develop multiscale scenarios for nature futures. This co-creation process will involve iterative cycles of visioning, stakeholder consultation, and modelling, across the IPBES regions and languages, different sectors, disciplines and indigenous and local communities. The next step is to identify and fill gaps in these visions, and iterate these with the current set of seven visions into a concise suite of future visions; this process will occur through global and regional on- and offline consultations in the course of 2018. Based on that, in 2019, modelling groups and expert teams will develop scenarios for each of the visions. This concludes one of several cycles, with the scenarios leading to a new round of storyline development and visioning.

B. Next steps in catalysing the further development of scenarios and models for IPBES

18. Based on the outcomes of the workshop on "New visions for nature and nature's contributions to people for the 21st century" and the workshop on "Way forward for IPBES scenario development", the expert group on scenarios and models will continue in 2018 and 2019, supported by the TSU, catalysing the further development of scenarios and models for IPBES (annex V to decision IPBES-4/1). The expert group's programme consists of six actions, each of which will be assigned to a subset of the expert group, supported by a member of the TSU (for more details, please see terms of reference in annex V to decision IPBES-4/1). The actions include:

(a) Write a scientific paper which presents the results from the workshop on "New visions for nature and nature's contributions to people for the 21st century" on 4-8 Sept. 2017 in Auckland, New Zealand, results from further stakeholder consultations and a way forward for IPBES scenario development. The paper will aim to mobilise the broader community to address the needs of IPBES regarding scenario development, thereby catalysing new research and participation by all sectors (governments, private sector, interest groups, indigenous and local communities and the broader scientific community);

(b) Develop a long-term research agenda for IPBES scenario development, following the workshop on visioning futures described above. This action aims at mobilising the scientific community to align their activities in support of the IPBES scenarios and models development agenda;

(c) Mobilize stakeholders across the IPBES regions and languages, sectors, and disciplines to identify gaps in and enrich the current set of seven visions on nature and nature's contribution to people by means of online and offline consultation;

(d) Consult stakeholders including indigenous and local communities and younger generations to consolidate and further enrich the current set of visions on nature and nature's contributions to people through global and regional on- and offline consultations. First rounds of consultations will be held in the first two quarters of 2018 and these results will aim to strengthen the foundations for the development of a robust set of visions, specifically tailored to the objectives of IPBES;

(e) Organise a second stakeholder workshop on visioning futures for biodiversity and ecosystem services, which will be a follow up to the workshop on the "New visions for nature and nature's contributions to people for the 21st century" (Auckland, New Zealand on 4-8 September 2017). The workshop will take place in the third quarter of 2018, and will be organised together with a partner organisation. The workshop is intended to bring together a subset of stakeholders from the first workshop and from the consultation rounds at multiple scales, including representatives of the scientific community, international institutions, governments, the private sector, indigenous and local communities and non-governmental organisations, ensuring a balanced representation of the diversity of stakeholder groups. In order to be meaningful for IPBES the development of pathways to these visions will be facilitated ensuring cross-scale and cross-sectoral scenarios;

(f) Follow-up activities on both existing and new scenarios will include capacity-building aimed at improving the uptake and use of scenarios and models by a broad range of policymakers and stakeholders. This should involve working with the capacity-building task force (deliverable 1 (a)) and policy support tools and methodologies (deliverable 4 (c)) and in-kind support for encouraging the development of a curriculum and network of training courses and for scenarios and models (see IPBES/4/INF/22 for an example of work that has already been catalysed by the Platform) and workshops where scientists, policymakers and stakeholders lay out strategies for mobilizing scenarios and models for decision-making. These activities will be carried out in close collaboration with the task force on knowledge and data (deliverable 1 (d)) in the context of the dialogues to be convened by this task force to catalyse the generation of new knowledge and fill knowledge gaps.

C. Schedule of work

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31. The schedule for this work is set out in the table below. Elements in bold indicate activities that will require funding from the trust fund or in-kind support above and beyond the in-kind contribution of the Government of the Netherlands.

	Actions and institutional arrangements
2018	Continuation of activity 1 (a): facilitate access to relevant literature on scenarios and models
	Continuation of activity 1 (b): facilitate access to scenarios and models outputs
	Continuation of activity 1 (c): coordinate the use of scenarios and models within the Platform. Support of the global and thematic assessments
	Continuation of activity 1 (d): further develop the evolving guide on the use of scenarios and models
	Continuation of activity 2 (a): catalyse the filling of gaps in knowledge on scenarios and models. Support fellows
	Continuation of activity 2 (b): catalyse the development of new scenarios
	Workshop of the expert group, other scientists and stakeholders to identify and address gaps and filling and catalysing the development of new scenarios
	Initiate activity 2 (c): Capacity-building to improve the uptake of participatory scenarios development (support 3 experts within the regions)
2019	All activities continue throughout the year
	Progress report on activities 1 and 2, including on support of the global assessment
	Workshop of the expert group, other scientists and stakeholders on developing new scenarios for the Platform
	Presentation of the work of the expert group at the seventh session of the Plenary
	Final report of the expert group on all activities

F. Cost

32. Following a decision from the Bureau at its tenth meeting (October 2017), advised by the MEP, an amount of $100,000 per year has been included in the provisional budgets for 2018 and 2019 (IPBES/6/9), which the Plenary will consider at its sixth session, in order to implement the work approved by the Plenary on scenarios and models.

33. The PBL Netherlands Environmental Assessment Agency will continue hosting the technical support unit for the further development of scenarios and models, and providing in-kind support. In addition, partner organizations will be providing funding to complement funding from the IPBES trust fund to support, in particular, the travel of participants.

Appendix I

Draft budget for 2018-19

Year	*Cost item*	*Assumptions*	*Estimated costs*
			(United States dollars)
2018	Activity 1 (d): further develop the evolving guide	co-conference: in co-operation with deliverable 4 (c) (2 experts 5-day visit to TSU, The Hague 2 x $3 750)	in kind
	Activities 2 (a): consultations on gaps (online cross-scale, regional, indigenous and local knowledge); and 2 (b): workshop to fill gaps and catalyse the development of new scenarios	In kind contribution by partner organizations for venue 4 days, 35 participants	in kind
		Travel and DSA to support 15 participants (15 x $3 750)	56 250
		Travel and DSA to support 2 fellows (2 x $3 750)	7 500
	Technical support	0.5 full-time equivalent professional position (50 per cent in kind)	18 750
	Activity 1 (c): coordinate to use scenarios in the regional and thematic assessments	2 experts attend the third author meeting of the global assessment (2 x $3 750)	7 500
2019	Activity 1 (c): coordinate to use scenarios in other assessments	2 experts attend Chapter CBD STTA (2 x $3 750)	7 500
	Activities 2 (b): second workshop on gap filling and catalysing development of new scenarios after consultation rounds, with expert group plus 2 additional experts	Cost of the venue (4 days, 35 participants) (25 per cent in kind)	8 750
		Travel and DSA to support 40 per cent of participants (15 x $3 750)	56 250
		Travel and DSA to support 2 fellows (2 x $3 750)	7 500
	Activity 2 (c): to improve uptake of participatory scenario development within regions	Travel and DSA to support 3 experts (3 x $3 750)	11 250
	Technical support	0.5 full-time equivalent professional position (50 per cent in kind)	18 750
	Total		**200,000**

Appendix II

New visions for nature and nature's contributions to people for the 21st century (workshop report)

Visions for nature and nature's contributions to people for the 21st century

Executive summary of the report from an IPBES visioning workshop held on 4-8 Sept. 2017 in Auckland, New Zealand

Visions for nature and nature's contributions to people for the 21st century

Full report can be downloaded at: http://www.niwa.co.nz/naturefutures

Authors:

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Artwork

Dave Leigh, Emphasise Ltd.; Mary Brake, Reflection Graphics; Pepper Lindgren-Streicher, Pepper Curry Design

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Technical Support

IPBES Technical Support Unit on scenarios and models held at PBL Netherlands Environmental Assessment Agency

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ipbes
Science and Policy for People and Nature

NIWA
Taihoro Nukurangi

Executive Summary

- Existing scenarios of biodiversity and ecosystem services (BES) have important limitations and gaps that constrain their usefulness for the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES). Specifically, they fail to incorporate policy objectives related to nature conservation and social-ecological feedbacks, they do not address the linkages between biodiversity and ecosystem services, and they are typically relevant at only a particular spatial scale. In addition, nature and its benefits are treated as the consequence of human decisions, but are not at the center of the analysis. To address these issues, **the IPBES Scenarios and Models Expert Group initiated the development of a set of Multiscale Scenarios for Nature Futures based on positive visions for human relationships with nature**.

- **The first step of this process was a visioning workshop with stakeholders and experts** on 4-8 September 2017 in Auckland, New Zealand. A total of 73 participants from inter-governmental organizations, national government organizations, non-governmental organizations, academia and the private sector, from 31 countries, and with a range of sectoral expertise on biodiversity topics, from urban development to agriculture to fisheries, worked together in a visioning exercise. This report documents the results from this visioning workshop to inform further stakeholder consultation and the development of the associated multiscale scenarios by modelers and experts.

- **This creative visioning exercise was carried out in four steps based on a suite of participatory methods that were used to develop visions of alternative futures (Figure 1)**. First the participants identified important themes to develop the visions. Next, thematic groups identified the main trends for BES in each theme and a set of "Seeds" of emerging initiatives leading to positive futures for our relationship with nature. Implications of what would happen across a range of sectors were identified for each seed. Then a pathway analysis of how the current regime in each theme may be transformed into the future desirable regime was carried out. Narratives were then built for the visions emerging from each group. Finally, commonalities of visions across the groups were identified, and the regional relevance of each vision for different parts of the world was assessed.

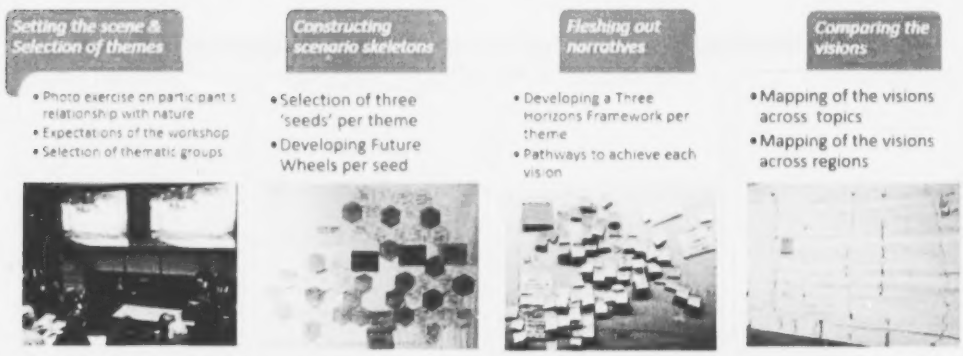
Setting the scene & Selection of themes
• Photo exercise on participants relationship with nature
• Expectations of the workshop
• Selection of thematic groups
Constructing scenario skeletons
• Selection of three 'seeds' per theme
• Developing Future Wheels per seed
Fleshing out narratives
• Developing a Three Horizons Framework per theme
• Pathways to achieve each vision
Comparing the visions
• Mapping of the visions across topics
• Mapping of the visions across regions

Figure 1. Steps in the development of the stakeholder visions

- Seven thematic groups emerged, with most groups developing a single vision. The visions were the following (Figure 2):

  Nature-based Inclusive Prosperity: A healthy world, where wealth and wellbeing is accessed fairly and natural resources sustain richly diverse cultures, societies and nature into the future. This would be achieved through a recharacterization of GDP "growth" to ensure it is connected to well-being and nature; international resource use taxation schemes which incentivise sustainable resource use; in-country development plans with ecological objectives and institutional mechanisms which support community-based economies and natural resource management.

  Sustainable Food Systems: a world without hunger based on a combination of sustainable supply chains between producers, traders, transporters and retailers, grounded on biodiversity-based food production at land-and seascape level, and supported by reciprocal agreements for sharing benefits, i.e., water and genetic materials.

ReFooding and ReWilding the Urban Rural Flows: a world where urban and rural dwellers reconnect with nature, reconcile their interests and assist each other in improving quality of life in the cities and valuing the countryside. Enhanced urban rural flows is achieved by improving governance systems and a locally-contingent mix of ReFooding, i.e. localized ecosystem service flows in cultural landscapes, and ReWilding, i.e. high-tech and global solutions to free up space for nature in the countryside and the cities.

Healthy Social-Ecological Freshwater Systems: a world where rivers are awarded legal rights as living systems, water use and extraction is done efficiently at the micro-scale in a circular economy paradigm with no waste-water, and a shift occurs from hydroelectric to other renewable energy systems, also at the micro-scale and decentralised.

A Tasty World with Values: a world where human-nature relations are based on reciprocity, harmony and relationality supported by educational systems infused by these values; food is predominantly produced in bio-culturally diverse and autonomous local food systems, strong cultural institutions ensure respectful sharing among diverse knowledge systems and governance systems share universal recognition of local small producers and indigenous peoples' sovereignty over territories, resources and knowledge.

Dancing with Nature: a world in which nature is given space to thrive. Nature is connected and changing at multiple scales. Dancing with Nature requires dynamic people, infrastructure, and civilizations. In this world, human societies build, live and work to accommodate and benefit from natural fluctuations, while using technology to enable people and nature to adapt to the challenges of the Anthropocene.

Healthy Oceans, Happy Communities: a world where the oceans and coasts are full of life, ecosystem services are sustained through the adoption of long-term sustainability strategies by governments and businesses (>500-year strategies) and the high-seas are closed to fishing. Local communities are involved in the sustainable management of coastal zones, and new technologies are developed to feed populations who also change their diets to decrease impacts on oceans.

in our group, we identified 3 SEEDS
that can contribute to our thematic area
SEED:
exist now but are marginal - not widespread or well known
EXAMPLES:
FOOD PRODUCTION
Biodiversity based food production & consumption systems & ecosystem based
Accessible equitable & respected agreements for water
Sustainable supply chain....
Successful re-wilding initiatives
Fossil fuel free future
Circular economy creating resonance with Consumers
Shortening supply chain & attraction to farmers
4D printing
3D acquisition
Car sharing
URBAN RURAL FLOWS
Rethinking governance & societal systems
connecting with nature through rethinking food systems
LOCAL FOOD PRODUCTION
Re-wilding countryside & bringing nature into cities

NATIONAL
GLOBAL
PROSPERITY
Community based natural resource management
Engineered Nature
Space & time for nature
Dancing with nature on an evolutionary stage
WATER
Cyclical micro water management systems are pervasive
No fossil fuels or hydro
CULTURE
Education reconnecting with nature
Biodiverse food systems based on values of harmony reciprocity & sovereignty
Cultural institutions are integrated & respected in managing & linking diversity of knowledge
Engaged indigenous/local community context over decision making – restoring systems
Sustainable global ocean
Sustainable marine food practice

Figure 2. The three seeds for each thematic group (Source: Dave Leigh, Emphasise Ltd.; Mary Brake, Reflection Graphics; Pepper Lindgren-Streicher, Pepper Curry Design). Groups correspond to the following visions: Food Production = Sustainable Food Systems, Urban Rural Flows = ReWilding and ReFooding the Urban Rural Flows, Prosperity = Nature based Inclusive Prosperity, Nature Dynamics = Dancing with Nature, Water = Healthy Social-Ecological Freshwater Systems, Marine = Healthy Oceans, Happy Communities, Culture = A Tasty World with Values.

- Common themes on **preferences for the future of our relationship with nature** emerged across the visions. Some visions emphasize the **indirect and intangible benefits** of biodiversity, such as in *ReWilding the Urban Rural Flows*, *Dancing with Nature*, and *A Tasty World with Values*, while others emphasize the **direct uses of nature**, such as in the *ReFooding* and *Sustainable Food Systems*. **Localization of ecosystem service flows** and the development of multifunctional landscapes is an important component of *ReFooding the Urban Rural Flows*, *Healthy Social-Ecological Freshwater Ecosystems*, *A Tasty World with Values*, and *Nature-based Inclusive Prosperity*, while others emphasize the **management of global ecosystem service flows** or the segregation of spatial uses of ecosystems, such as *ReWilding the Urban Rural Flows*, *Dancing with Nature*, and *Healthy Oceans, Happy Communities*. Other themes emerging from a cross-cutting analysis include the **appreciation of specific elements of biodiversity** or a more **holistic appreciation of biodiversity**, varying degrees of the use of **technology to improve nature benefits**, and varying **intensities of nature management**. Shared themes across multiple visions include green infrastructure, a circular economy, context-dependent learning to inform environmental governance, and the equalization and reduction of humanity's global footprint. Several visions, e.g., *A Tasty World with Values*, require a societal paradigm shift and significant changes in values.

- **These visions differ conceptually from traditional scenarios** that are used in environmental management, with the emphasis on nature and nature's benefits to people, and in visioning solely positive futures. These visions also allow for the inclusion of **dynamic processes and feedbacks between humans and nature** that are missing in current scenarios, e.g., **changes in socio-cultural values and changes in practices** and concrete strategies for how such changes would come about, inclusion of qualitative values e.g., sense of place, **distribution of stakeholders' preferences**, teleconnections, and the **complexity of biodiversity change** (including aspects such as invasive and endemic species, and spatial scale).

- The visions identified in the workshop do not represent all possible positive future visions; rather, this workshop was just the first step in a 4-year process of developing Multiscale Scenarios for Nature Futures. This process involves iterative cycles of **visioning**, **stakeholder consultation**, and **modelling** (Figure 3). The current set of visions needs now to be consolidated, eventually into a smaller set of visions, through **global, regional and local consultations** during 2018. We envision using **fora such as meetings related to the Convention on Biological Diversity, the Future Earth Network, the Natural Capital Coalition**, **the High-level Political Forum on Sustainable Development** among others to refine the visions and develop the scenarios. Modelling groups and expert teams will then develop scenarios for each of the visions, that will lead to a new round of storyline development and visioning. It is likely that gaps in visions (i.e., alternative futures that were not identified at the Auckland workshop) will be identified and additional visions will be incorporated into further iterations of the Multiscale Scenarios for Nature Futures. The IPBES expert group on scenarios and models will guide this process up to the end of 2019, when its mandate ends. Scenario development will then continue under the leadership of a consortium of institutes, that will be duly initiated.

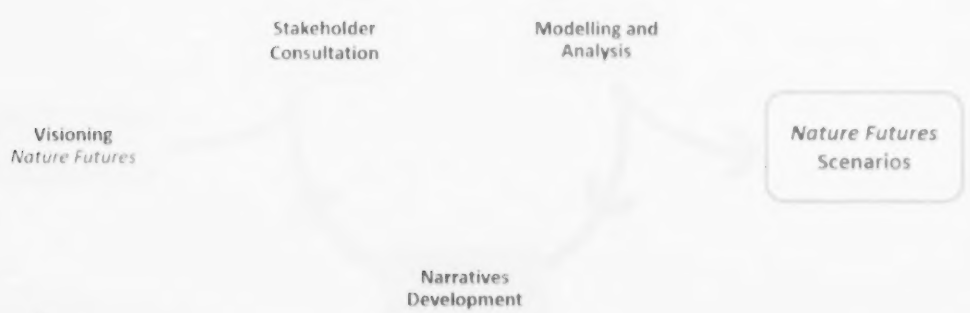

Figure 3. Iterative process for Nature Futures Scenarios development

- **The process of iterating multiscale scenarios for nature futures requires substantial ongoing efforts and funding, and capacity building** both within and aligned with the IPBES Work Programme. The development of the multiscale scenarios for nature futures needs to **link both to ongoing work on both global scenarios** connected to IPCC and UNEP GEO processes and to business and government scenarios, as well as inform the increasing number of local, national and regional social-ecological scenarios. Further efforts will be made to engage and coordinate with diverse platforms already involved in local/regional participatory scenarios development. One funding call of direct relevance to this work, the BiodivERsA/Belmont Forum call, has

been put forward and will provide substantial support toward developing Nature Futures scenarios. However, the geographic limitations of this call suggest that other funding opportunities are required to fulfil the regional geographic representation called for by the Multiscale Scenarios for Nature Futures, and to better coordinate the rapid growth in national and regional scenario approaches.